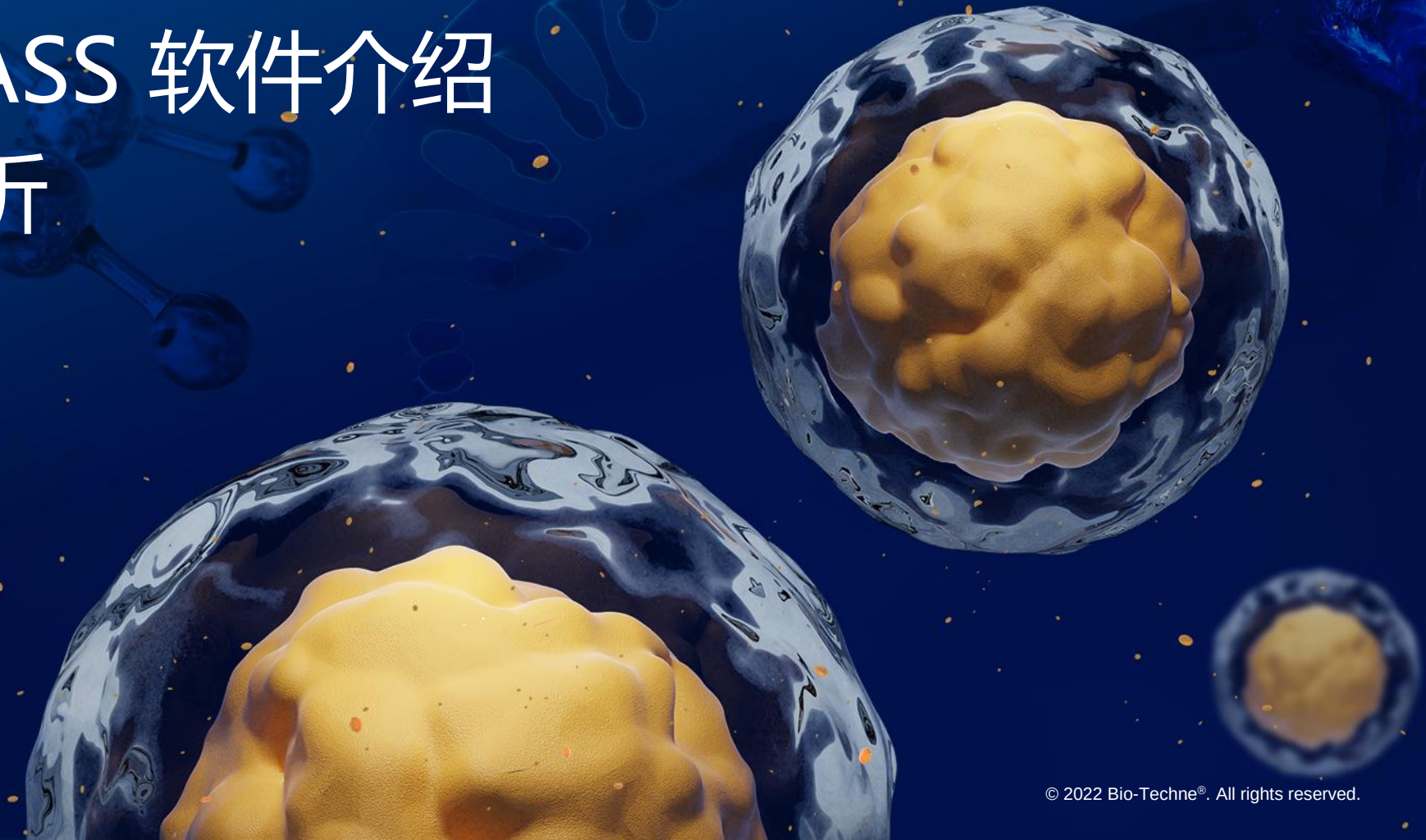
bio-techne®

COMPASS 软件介绍
数据分析

Xianting Wang

Mar, 2022



PROTEIN SIMPLE -- 创新蛋白质分析技术专家

Jess/Abby/Wes

全自动 Western

FluorChem

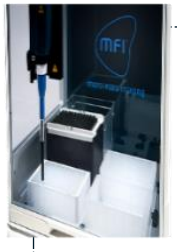
多功能成像

Ella

微流控全自动 ELISA

Milo

单细胞 Western



MFI

微流成像颗粒计数分类仪

Maurice

CE-SDS + icIEF 双功能 CE

MEET SIMPLE WESTERN

JESS ABBY WES

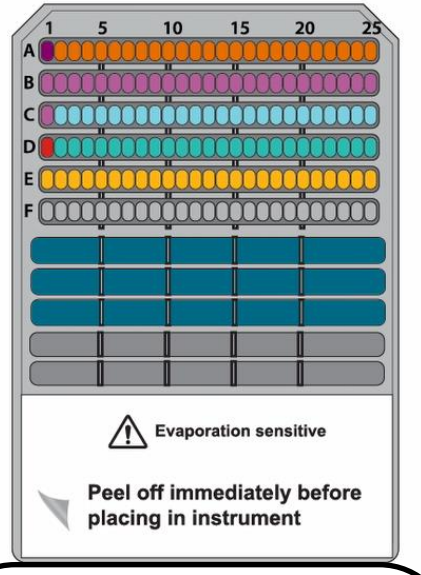
GEL-RUNNING AUTO
TRANSFER-FREE
BLOT-FREE
HANDS-FREE

超微量样品+自动化+定量

1. Simple Western 工作原理
2. Simple Western 优势及应用
3. Simple Western 实验操作简介

您需要做的工作

1. 配制样品和试剂
- 加样
- 混匀
- 加热

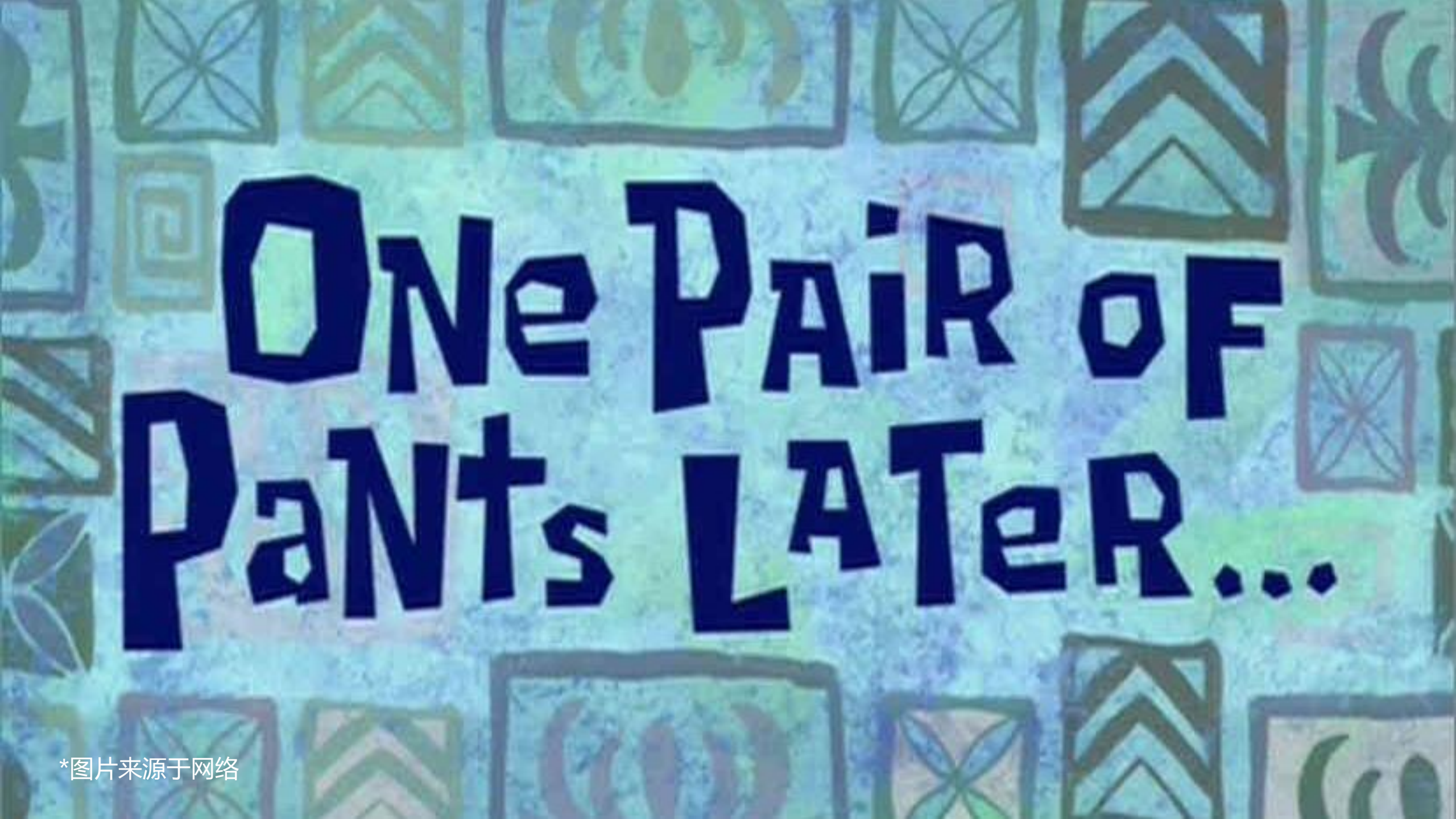


2. 加样
- 加marker
- 加样品
- 加封闭液
- 加一抗
- 加二抗
- 加发光液
- 加洗液

3. 运行
- 放毛细管卡盒
- 放加样板
- 运行程序

Compass for SW

*样品不能加 Loading Buffer



*图片来源于网络

运行结束后

File Edit Instrument Window Help

Assay | Run Summary | Analysis

Run: ERK 1 Wes run results rev 001

Status | History

run	Wes Installation run
path	C:\
assay	Wes-25 Size
kit info	Regular: 12-230 kDa
instrument	Wes : Wes WS2002 - WS2002
plate S/N	7751502228
started	星期日 4:10 下午 一月 10, 2016 CST
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Sample	Sep	B	1°	2°	Detect	Results
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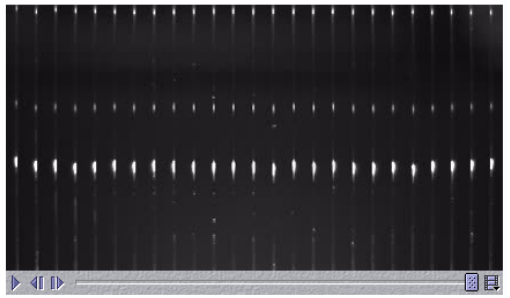
Separation | IV Plot



01

Compass 介绍

02

数据分析前检查

03

数据分析

01

Compass 介绍

02

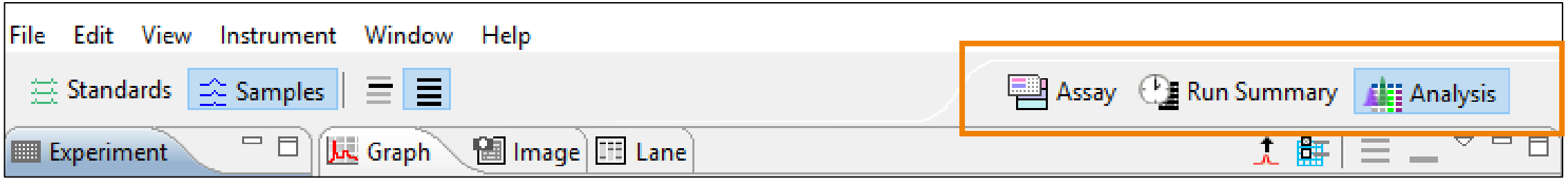
数据分析前检查

03

数据分析

COMPASS 有三个主要界面

- Assay – 实验前的设置
- Run summary – 运行过程中的实时情况
- Analysis – 分析界面



ASSAY 界面

File Edit Instrument Window Help

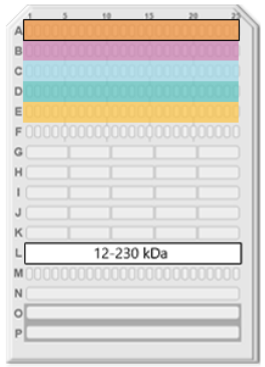
Assay Run Summary Analysis

Assay: Wes Size

Protocol History Notes

Add Remove

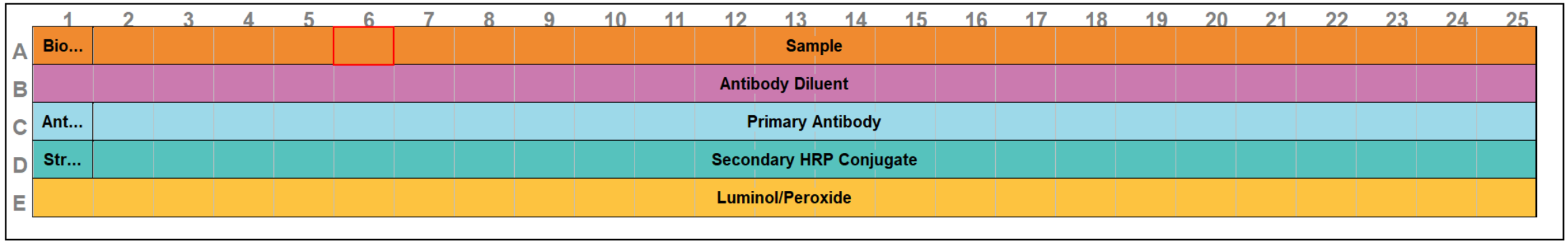
Layout



	Value
Separation Matrix	
Stacking Matrix	
Sample	
Separation Time (mi	25.0
Separation Voltage	375
Antibody Diluent Ti	5.0
Primary Antibody T	30.0
Secondary Antibody	30.0
Detection	
Well Row	E1
Detection Profile	HDR

Template

Edit



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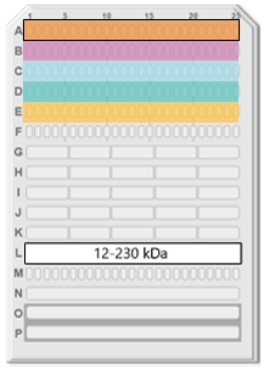

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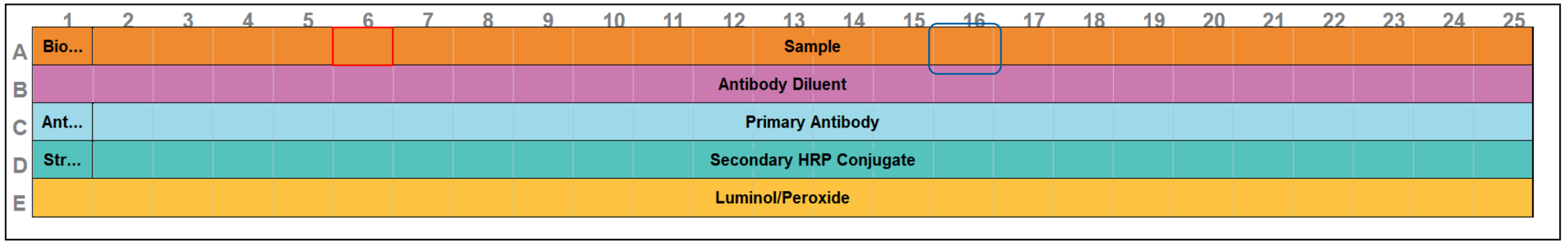

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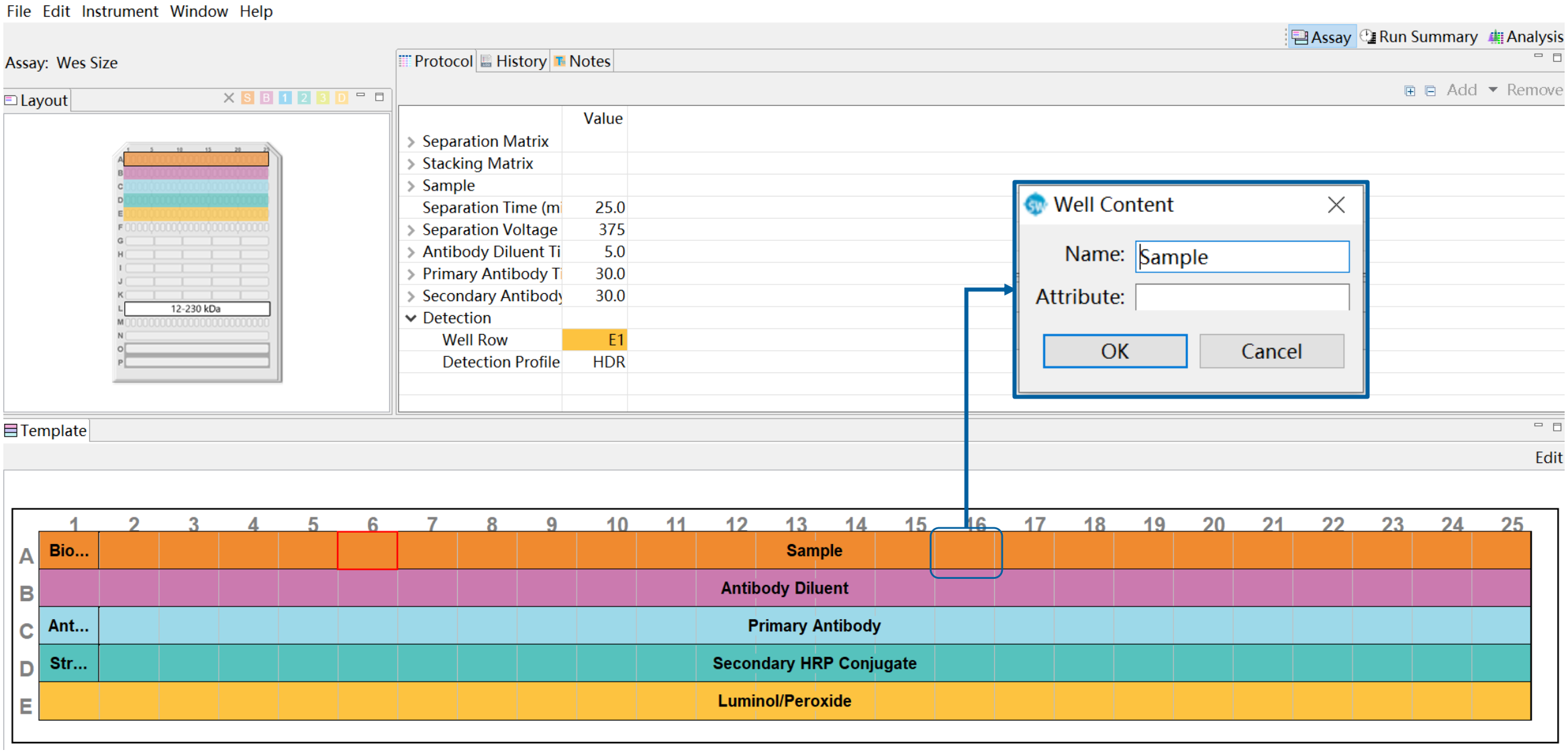

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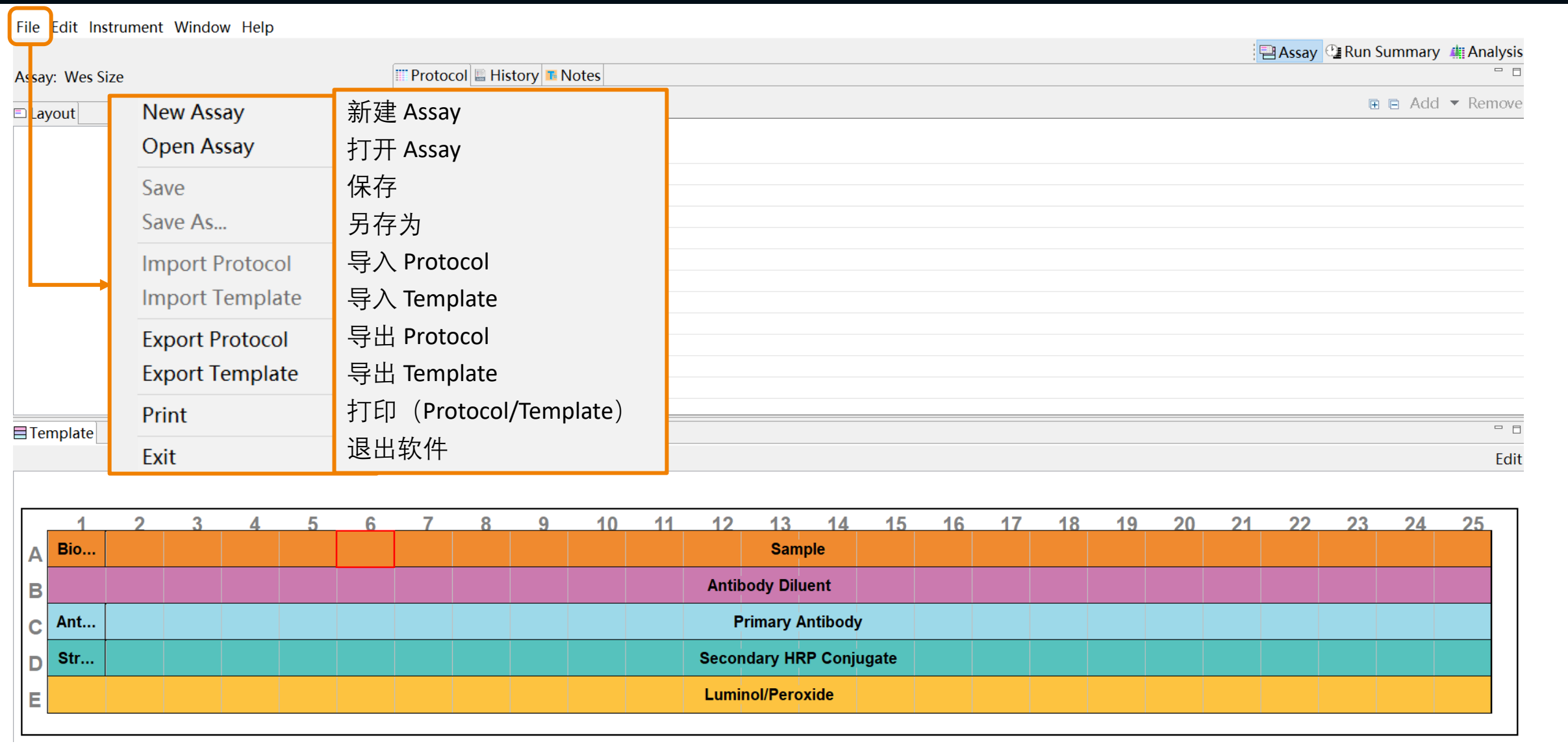

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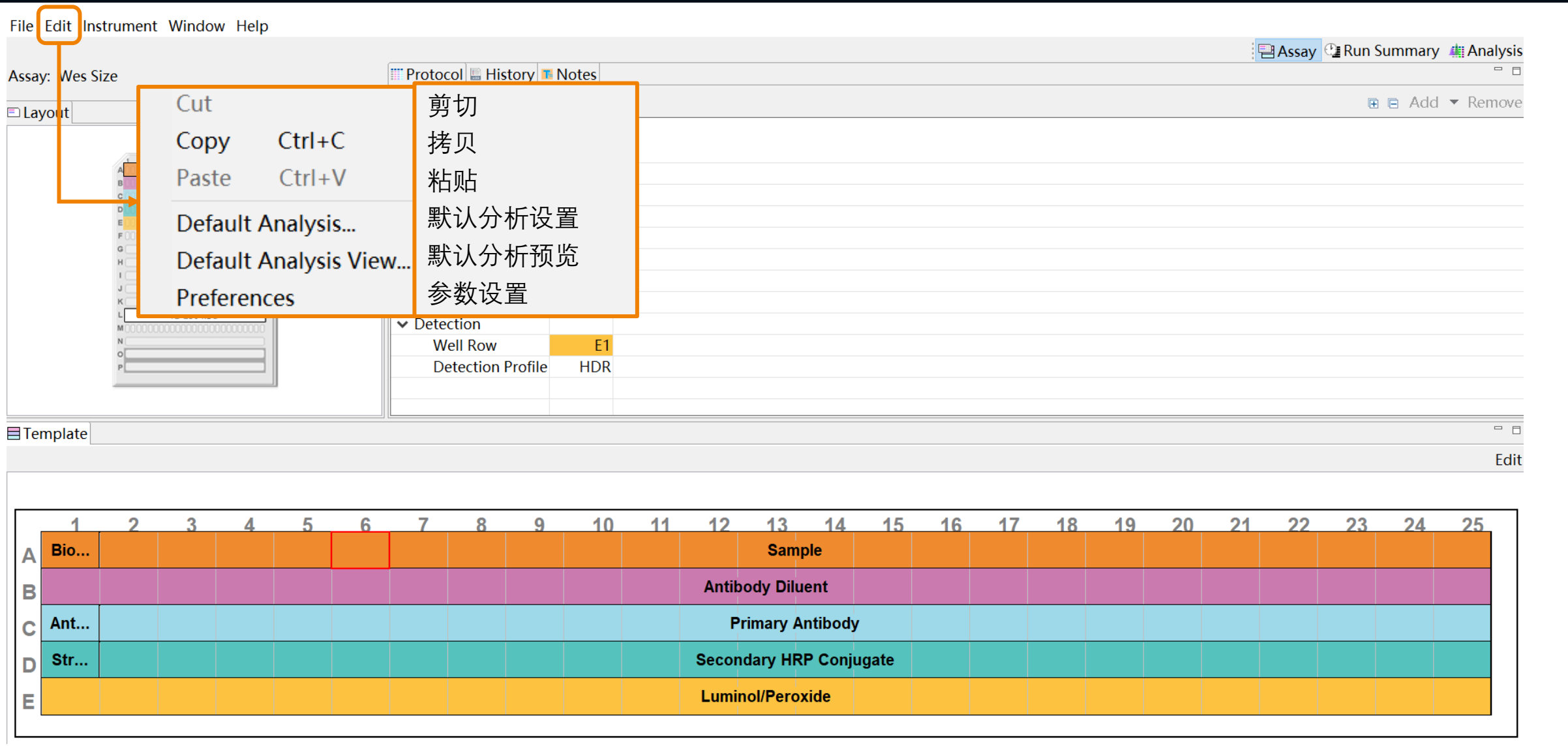

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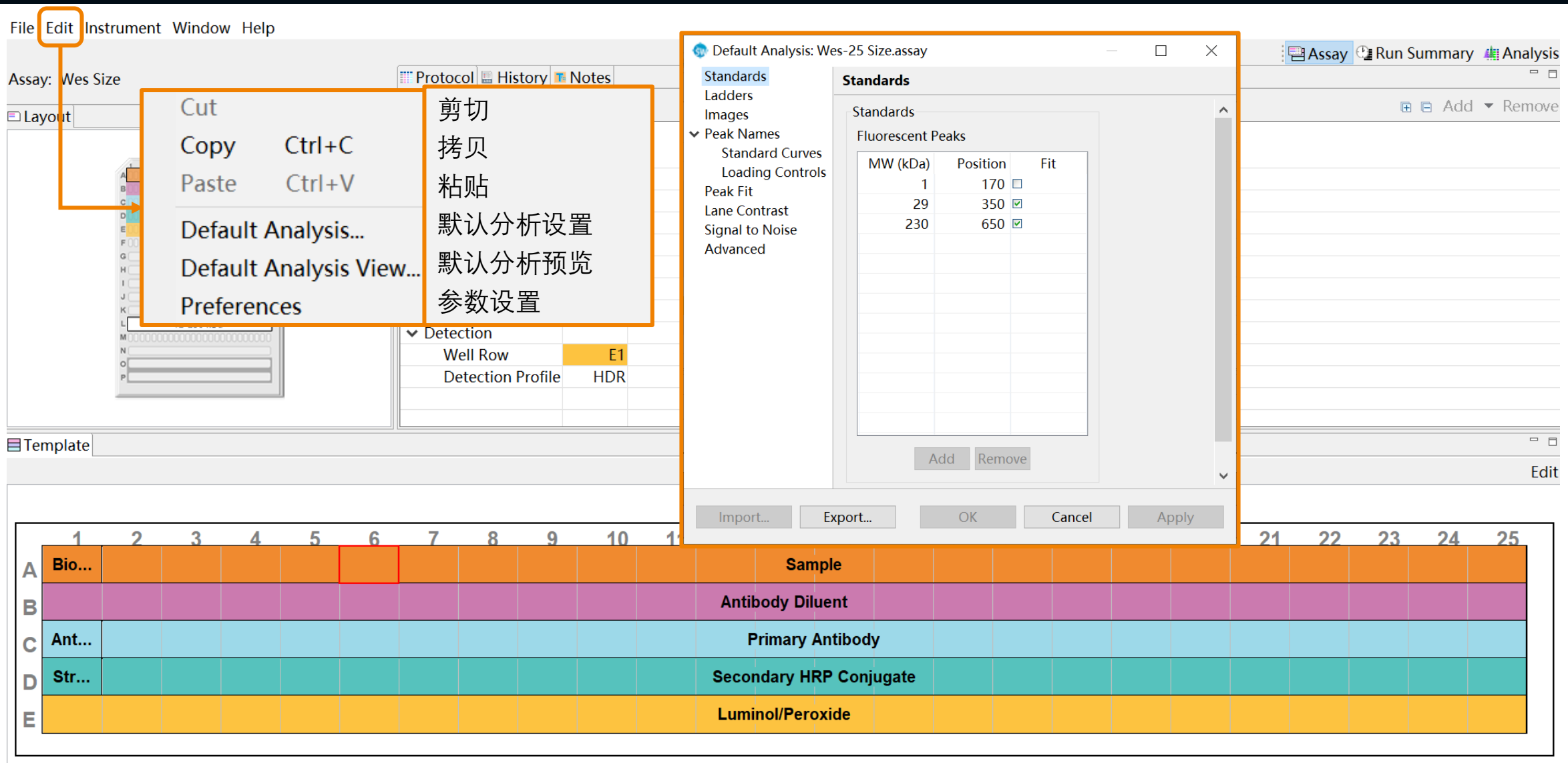

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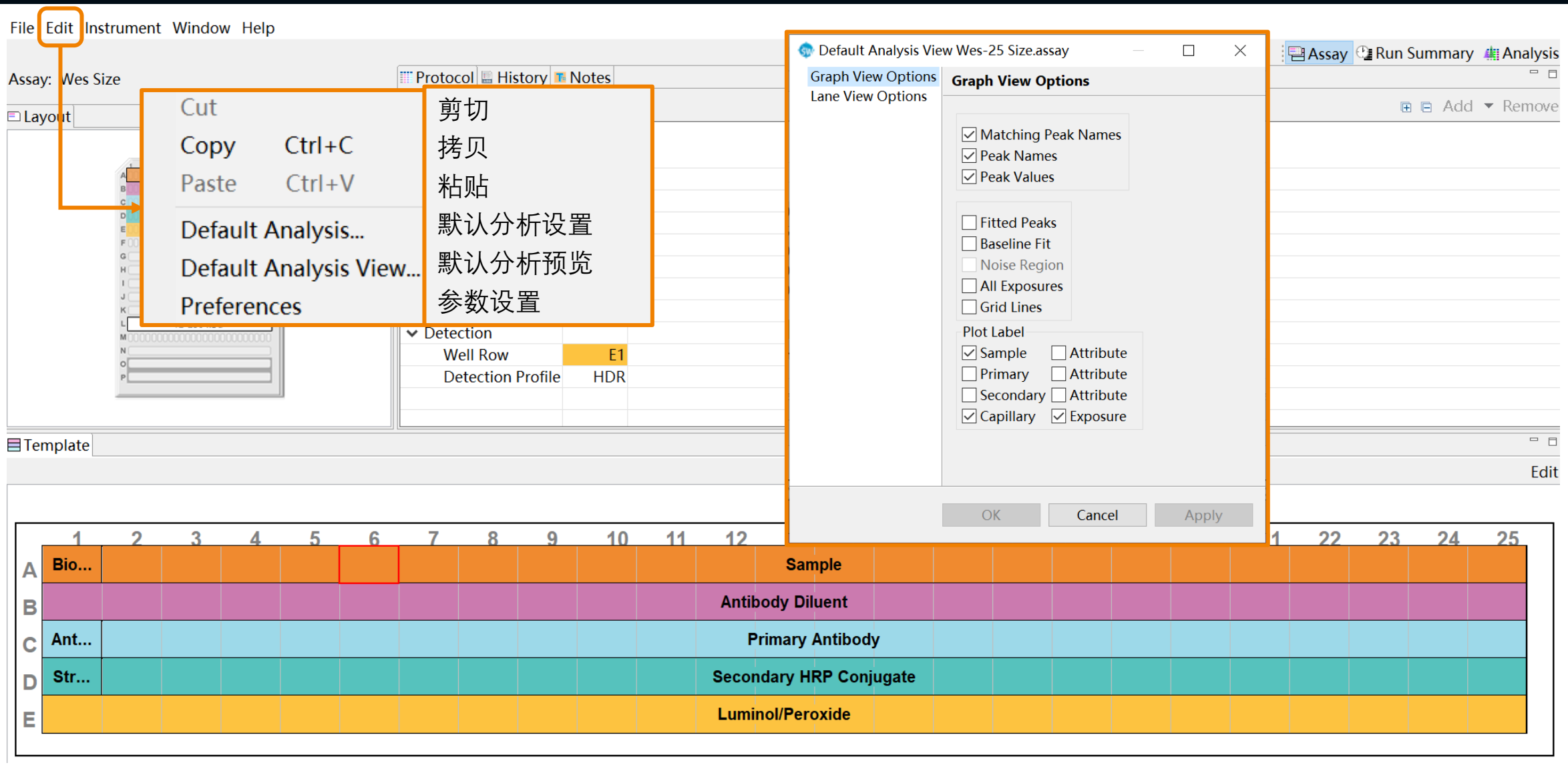

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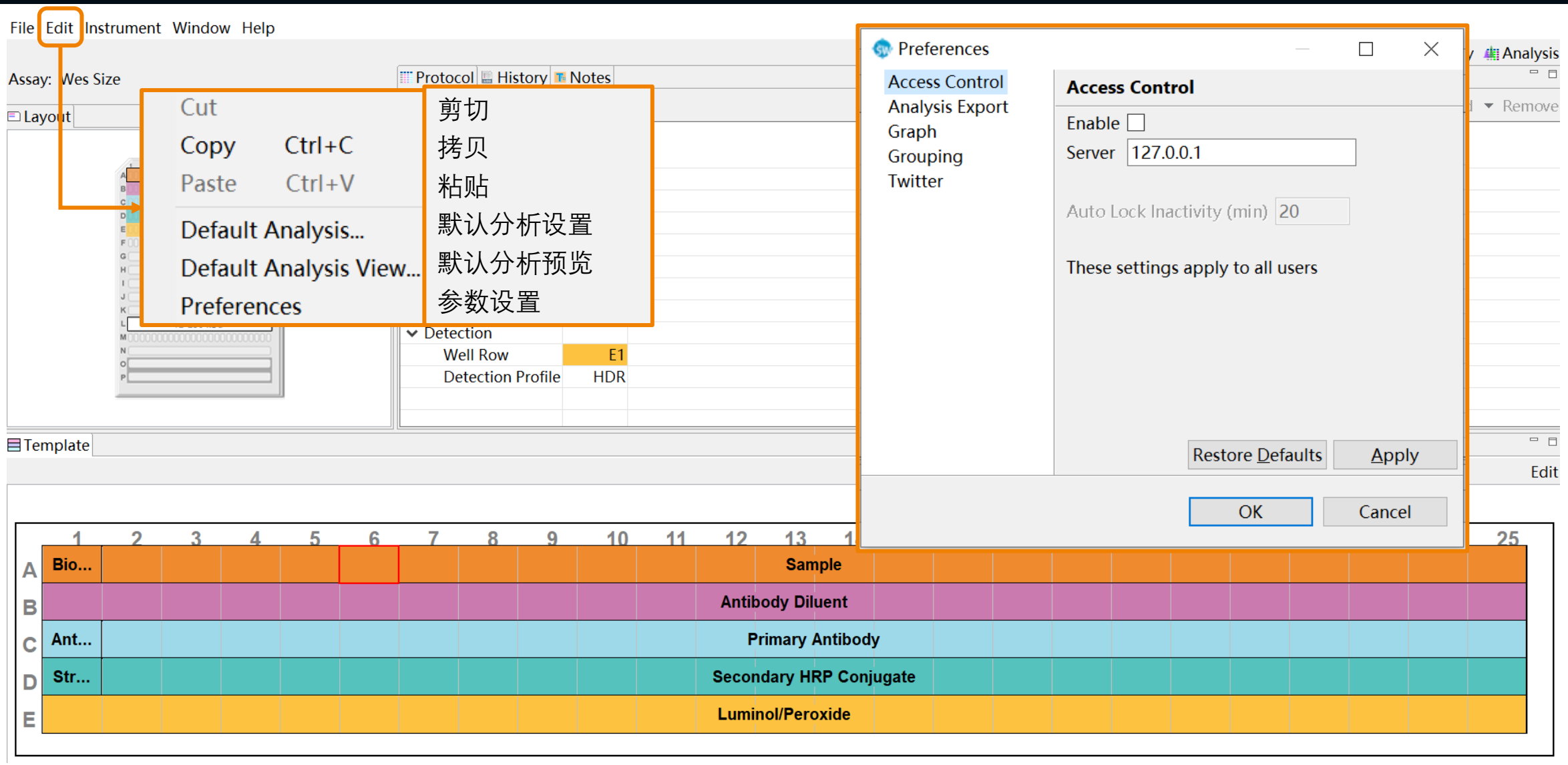

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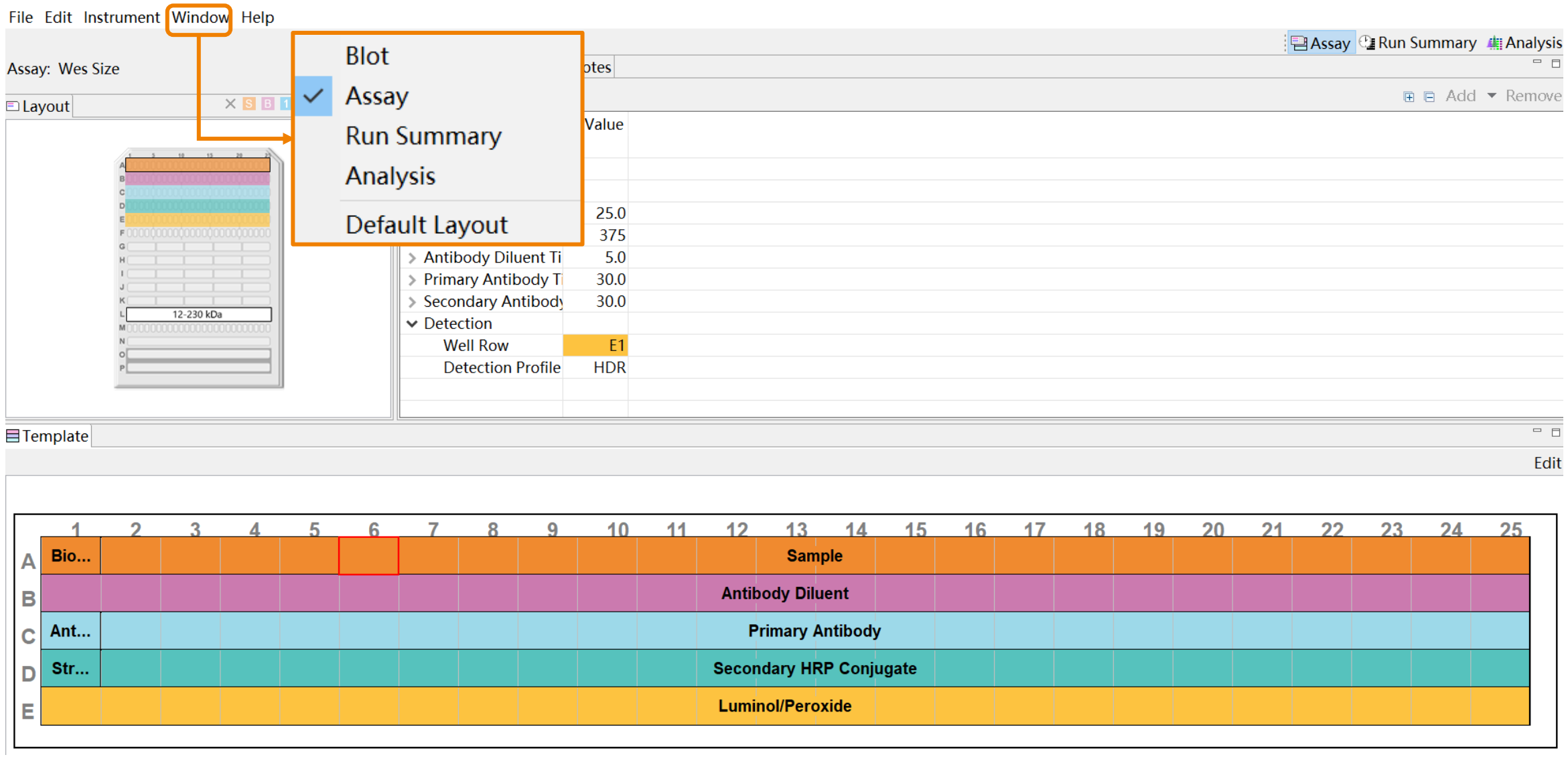

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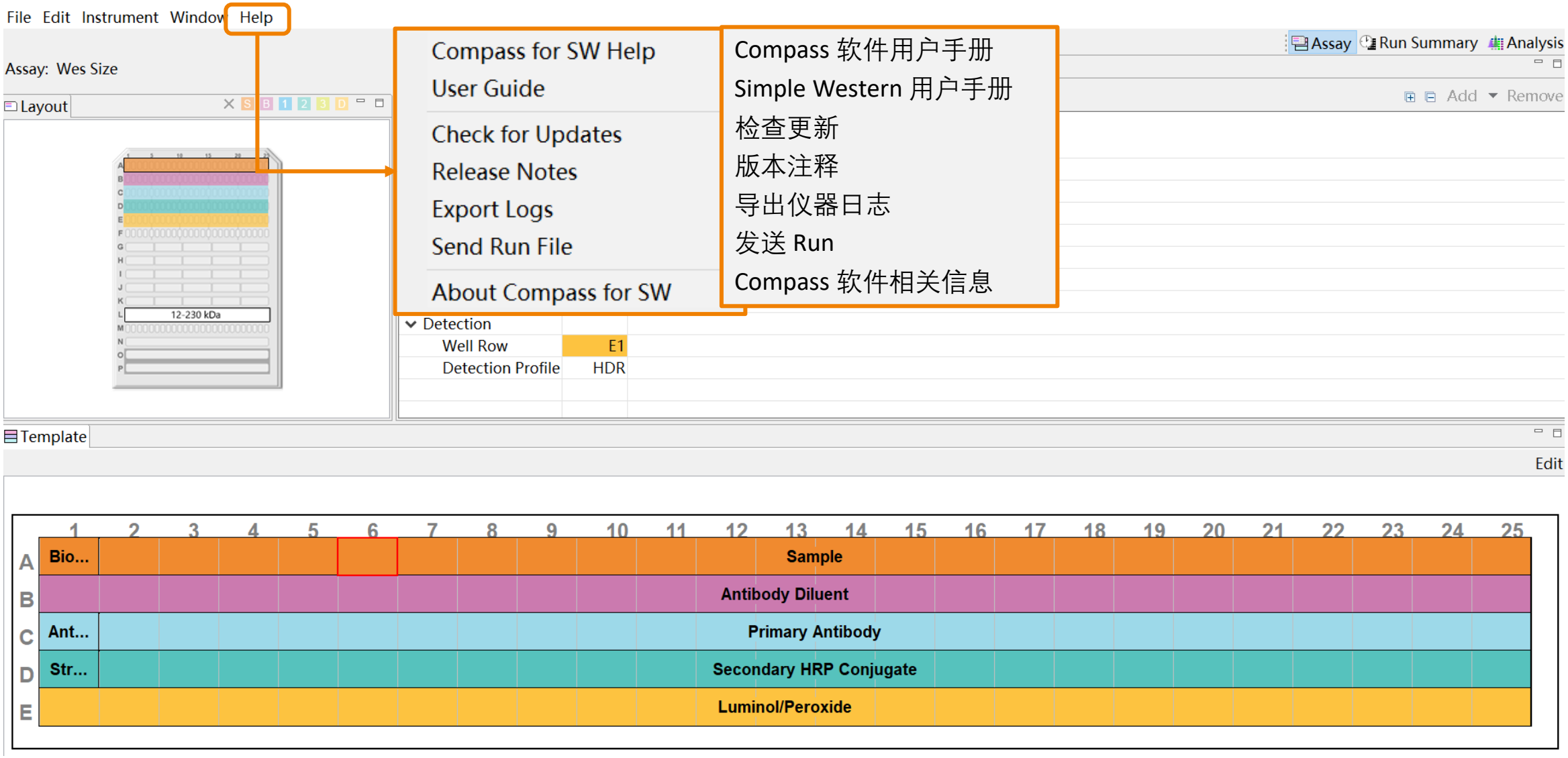

RUN SUMMARY 界面

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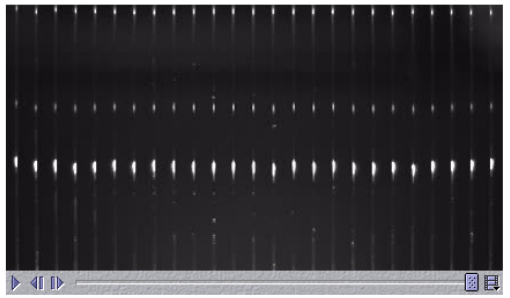

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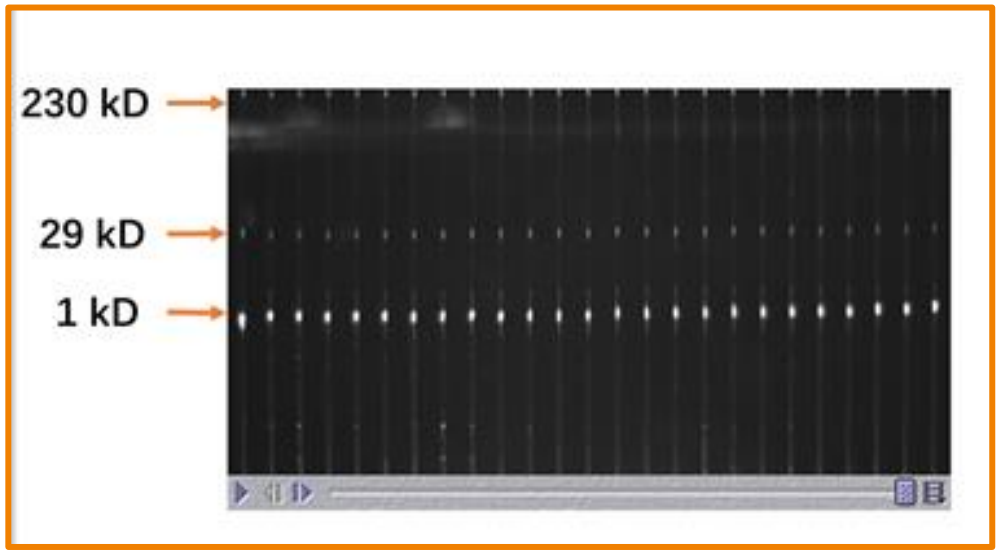
- 12–230 kit：1 kDa，29 kDa ，230 kDa
- 66–440 kit：57 kDa， 280 kDa
- 2–40 kit：1 kDa， 26 kDa

Separation | IV Plot



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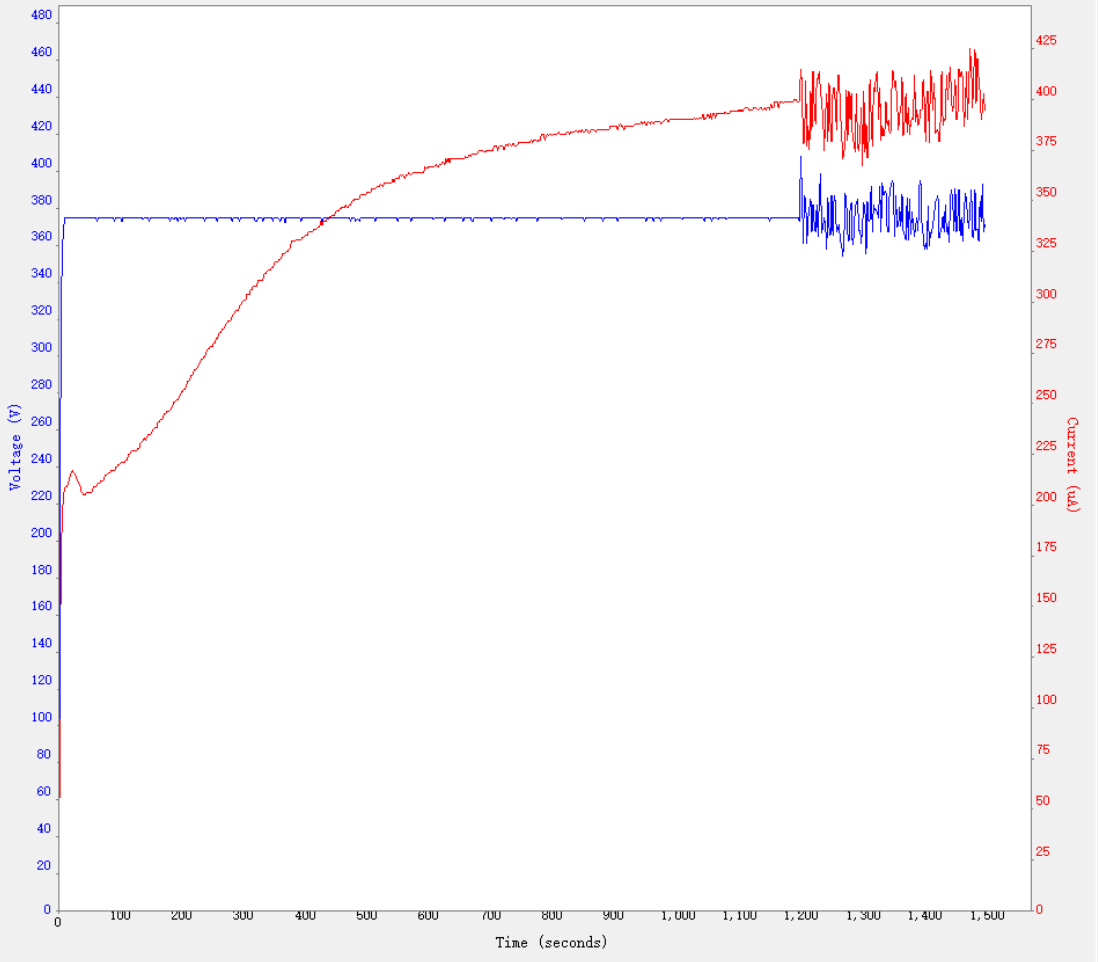
Separation | IV Plot

Zoom Out



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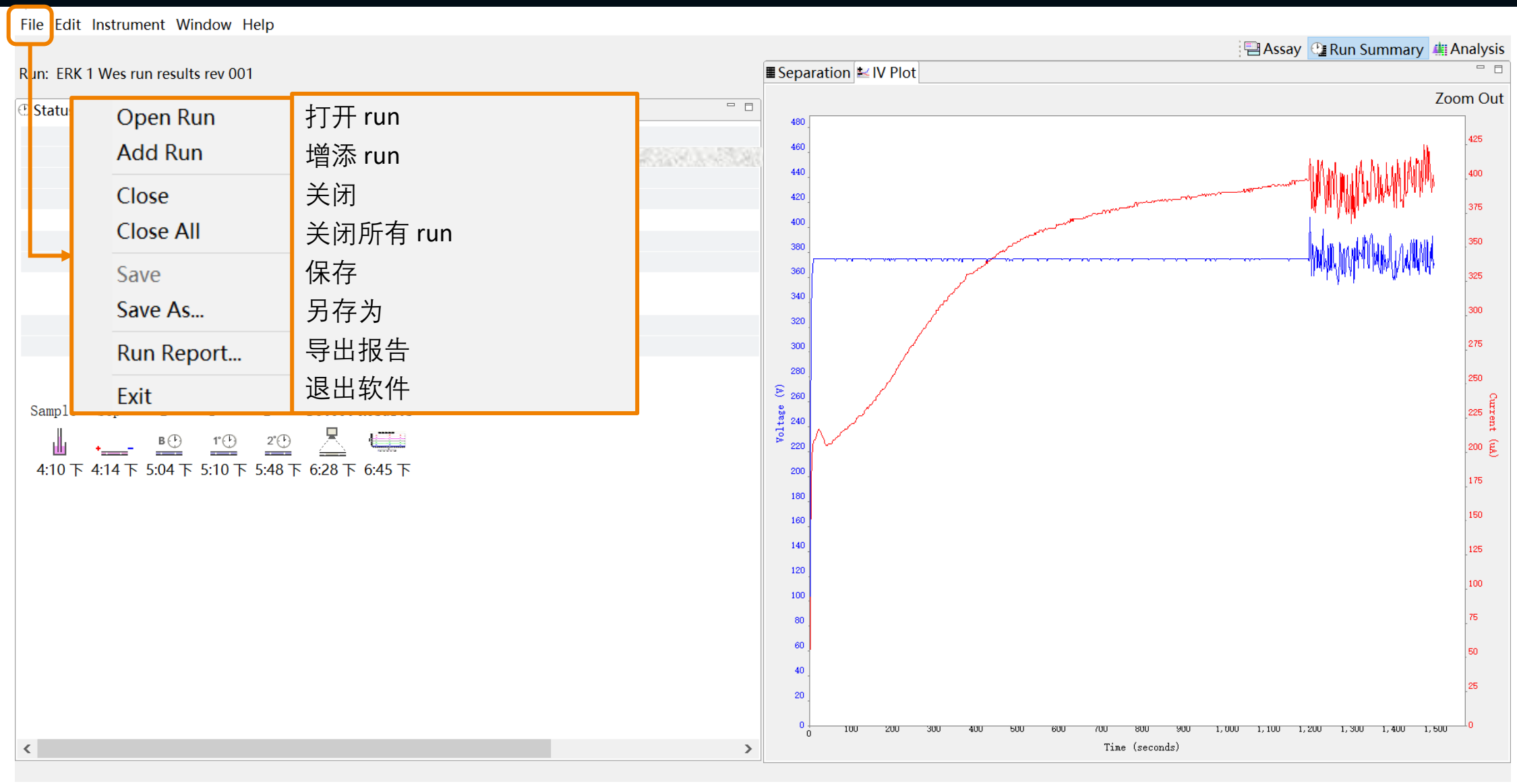

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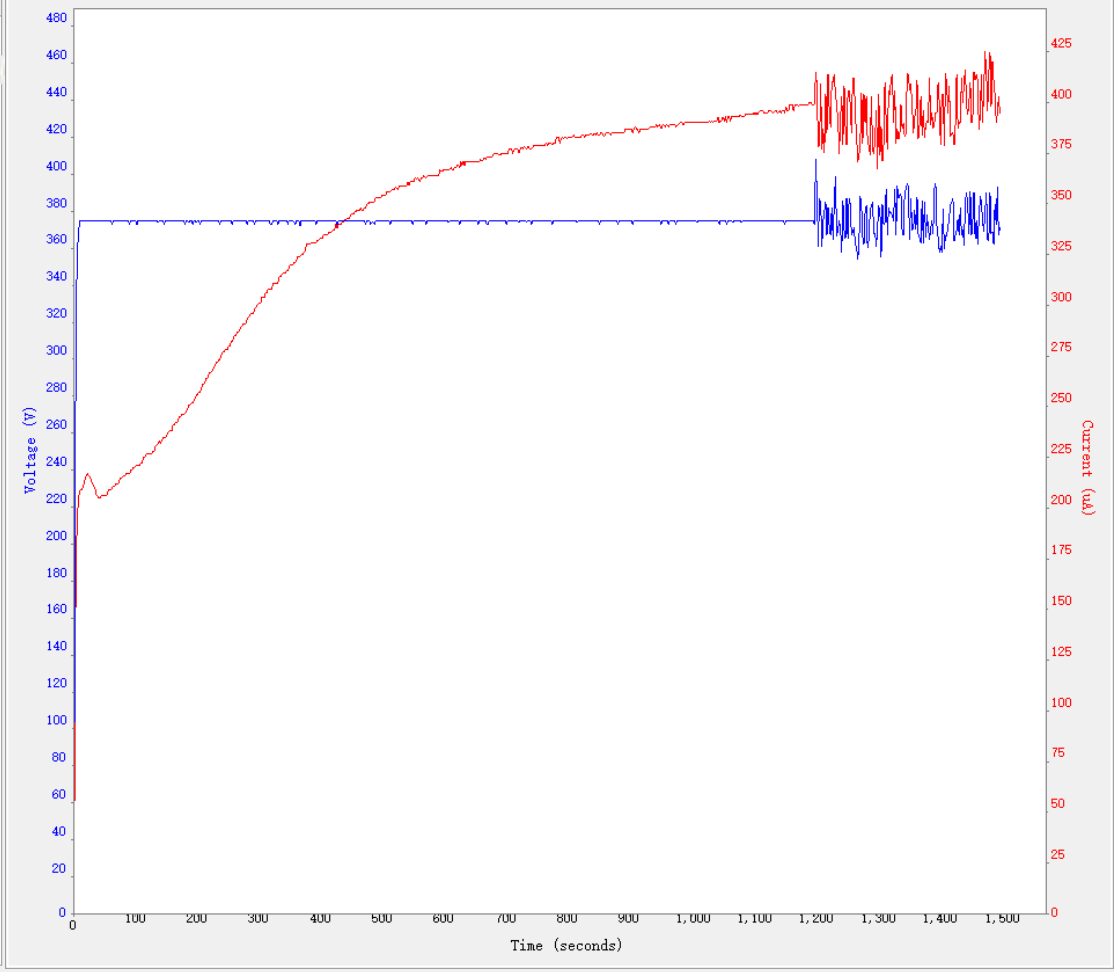

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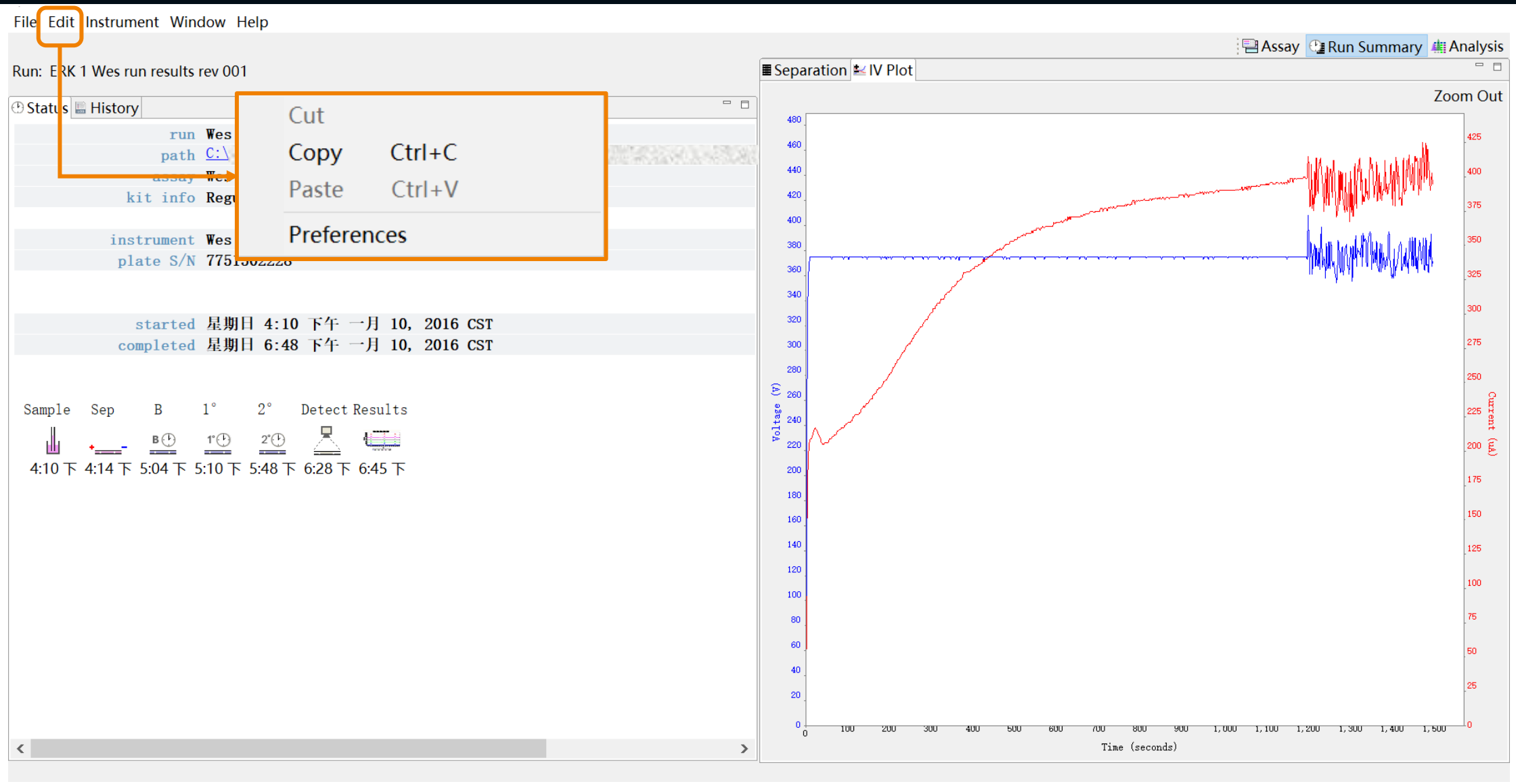
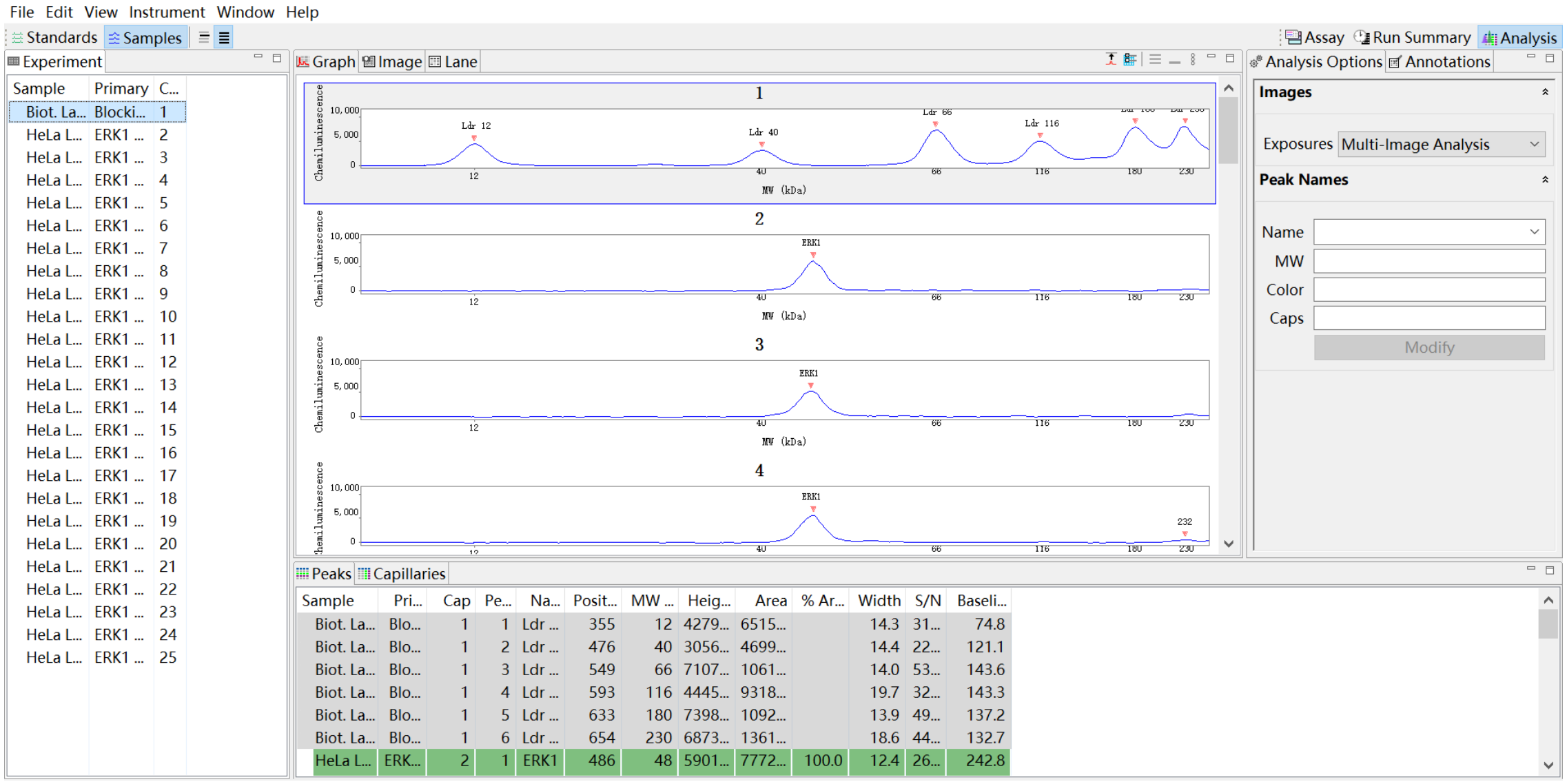


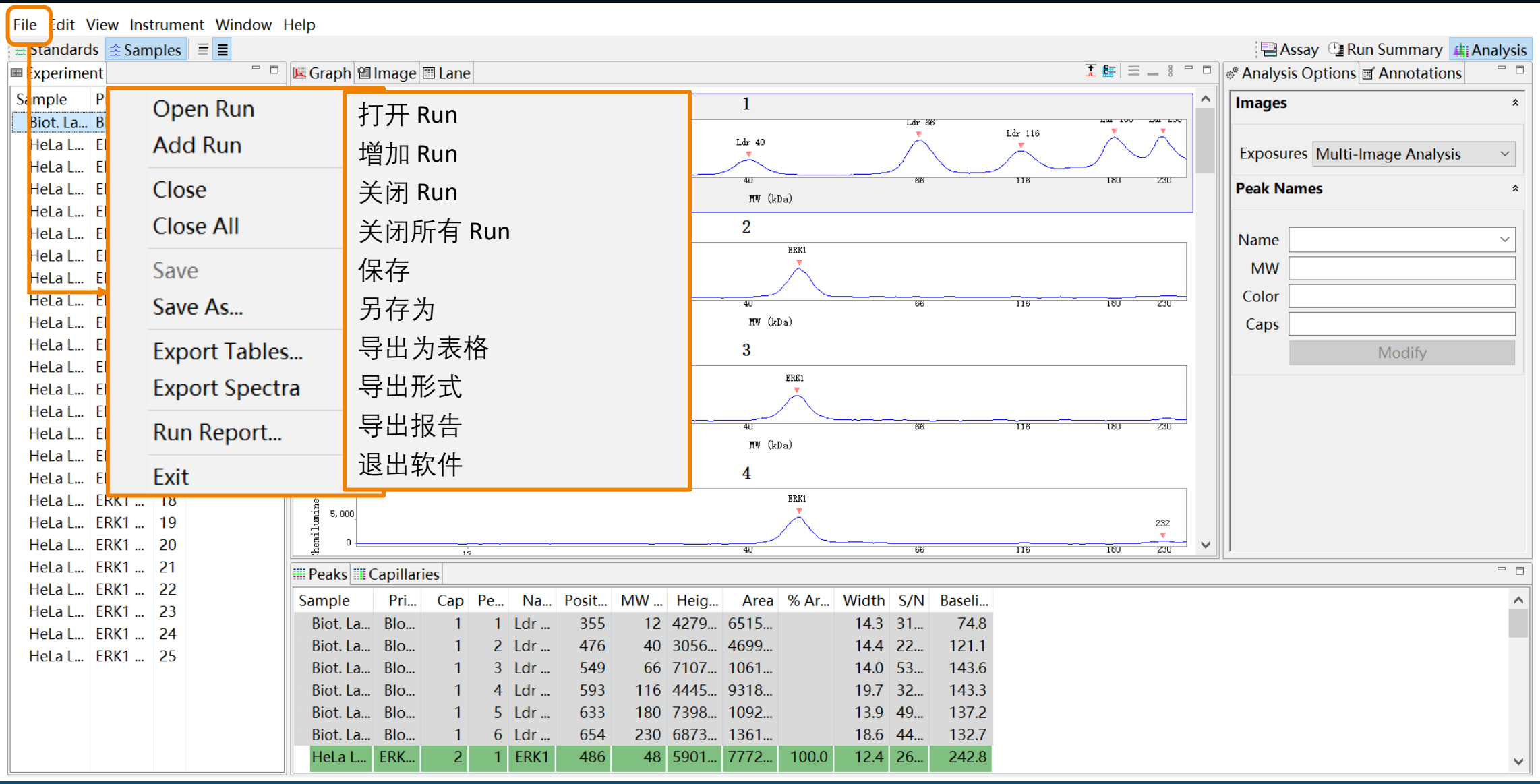
ANALYSIS 界面



Sample	Primary	C...
Biot. La...	Blocki...	1
HeLa L...	ERK1 ...	2
HeLa L...	ERK1 ...	3
HeLa L...	ERK1 ...	4
HeLa L...	ERK1 ...	5
HeLa L...	ERK1 ...	6
HeLa L...	ERK1 ...	7
HeLa L...	ERK1 ...	8
HeLa L...	ERK1 ...	9
HeLa L...	ERK1 ...	10
HeLa L...	ERK1 ...	11
HeLa L...	ERK1 ...	12
HeLa L...	ERK1 ...	13
HeLa L...	ERK1 ...	14
HeLa L...	ERK1 ...	15
HeLa L...	ERK1 ...	16
HeLa L...	ERK1 ...	17
HeLa L...	ERK1 ...	18
HeLa L...	ERK1 ...	19
HeLa L...	ERK1 ...	20
HeLa L...	ERK1 ...	21
HeLa L...	ERK1 ...	22
HeLa L...	ERK1 ...	23
HeLa L...	ERK1 ...	24
HeLa L...	ERK1 ...	25

Sample	Pri...	Cap	Pe...	Na...	Posit...	MW ...	Heig...	Area	% Ar...	Width	S/N	Baseli...
Biot. La...	Blo...	1	1	Ldr ...	355	12	4279...	6515...		14.3	31...	74.8
Biot. La...	Blo...	1	2	Ldr ...	476	40	3056...	4699...		14.4	22...	121.1
Biot. La...	Blo...	1	3	Ldr ...	549	66	7107...	1061...		14.0	53...	143.6
Biot. La...	Blo...	1	4	Ldr ...	593	116	4445...	9318...		19.7	32...	143.3
Biot. La...	Blo...	1	5	Ldr ...	633	180	7398...	1092...		13.9	49...	137.2
Biot. La...	Blo...	1	6	Ldr ...	654	230	6873...	1361...		18.6	44...	132.7
HeLa L...	ERK...	2	1	ERK1	486	48	5901...	7772...	100.0	12.4	26...	242.8

ANALYSIS 界面



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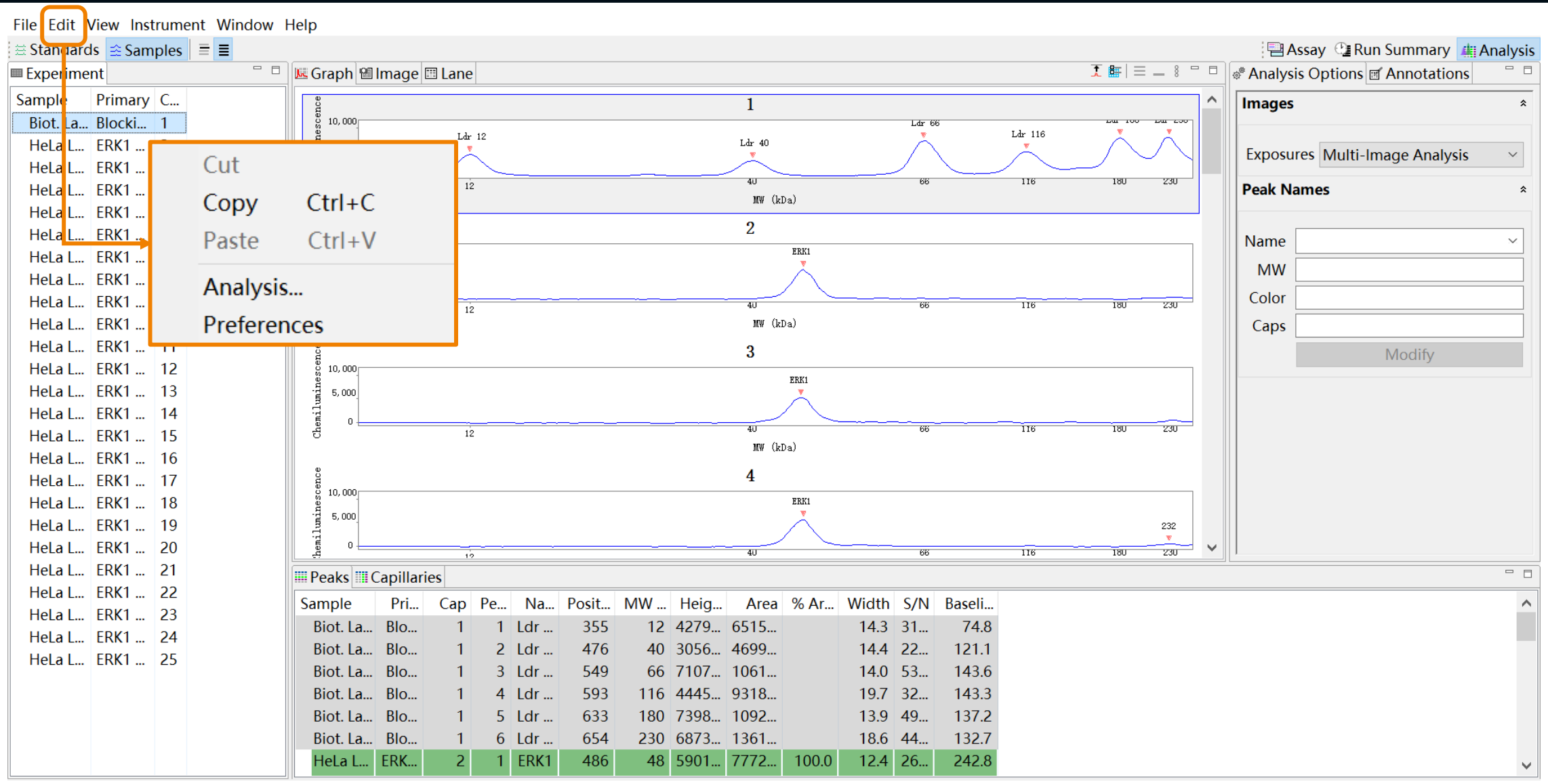

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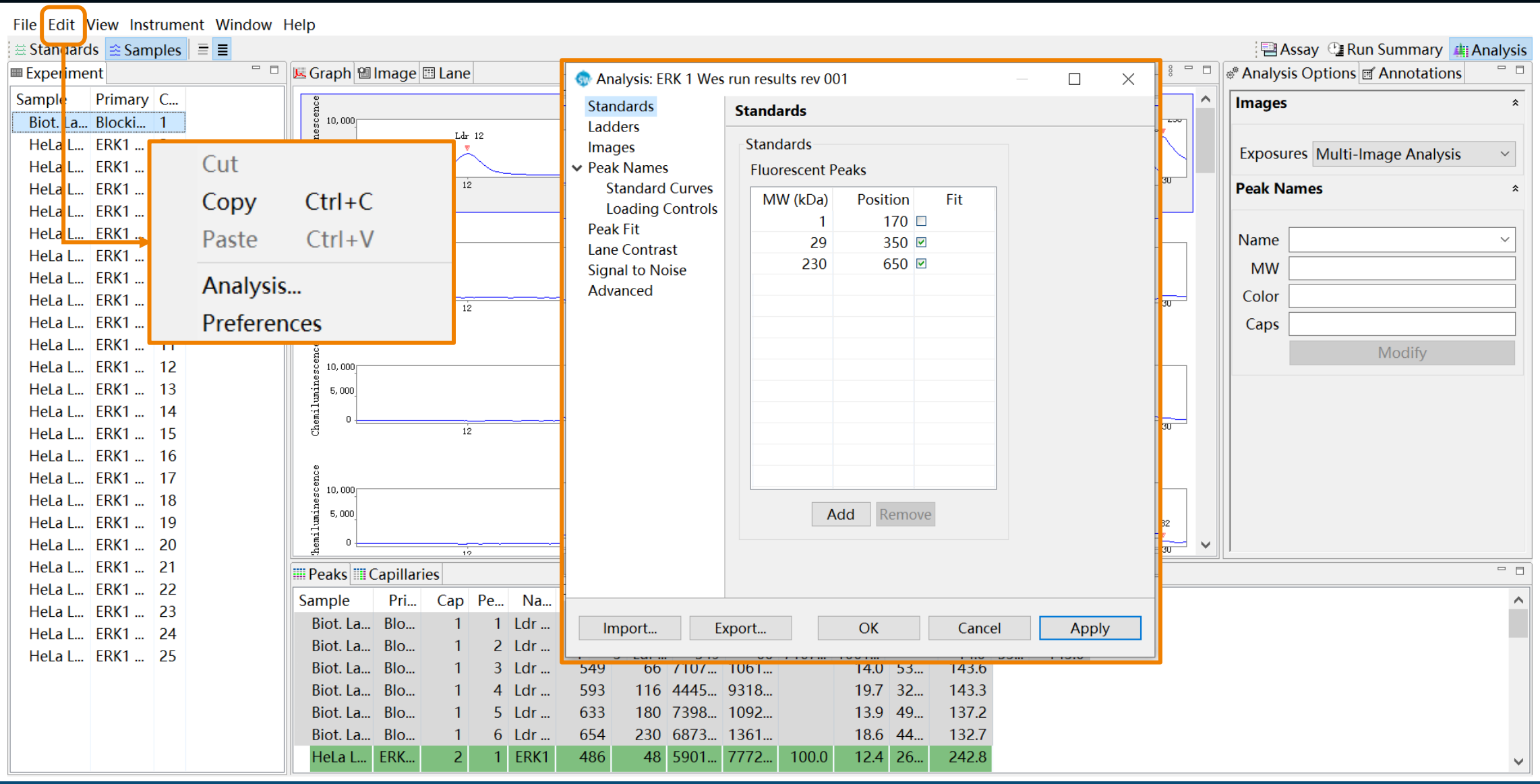

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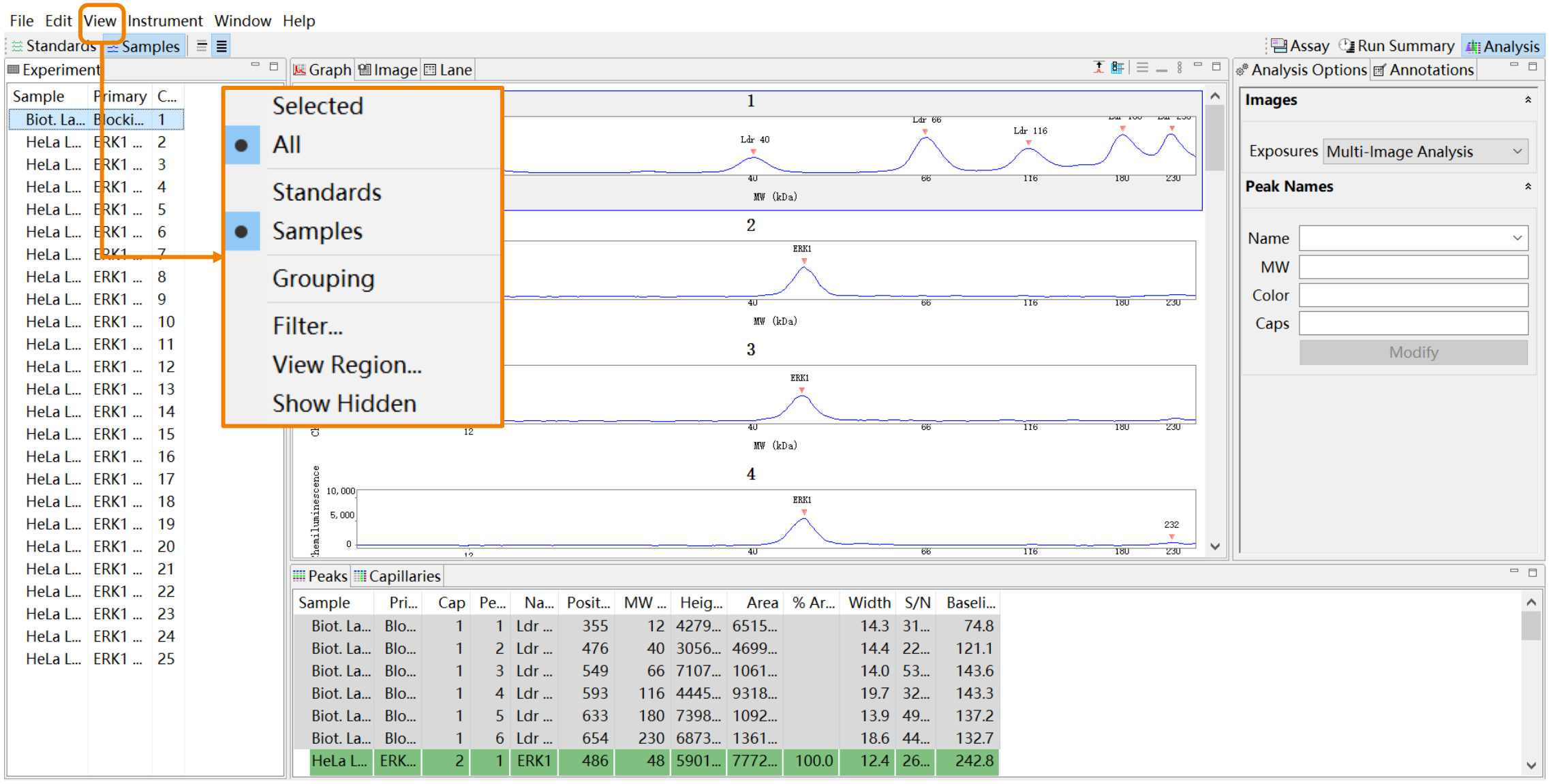

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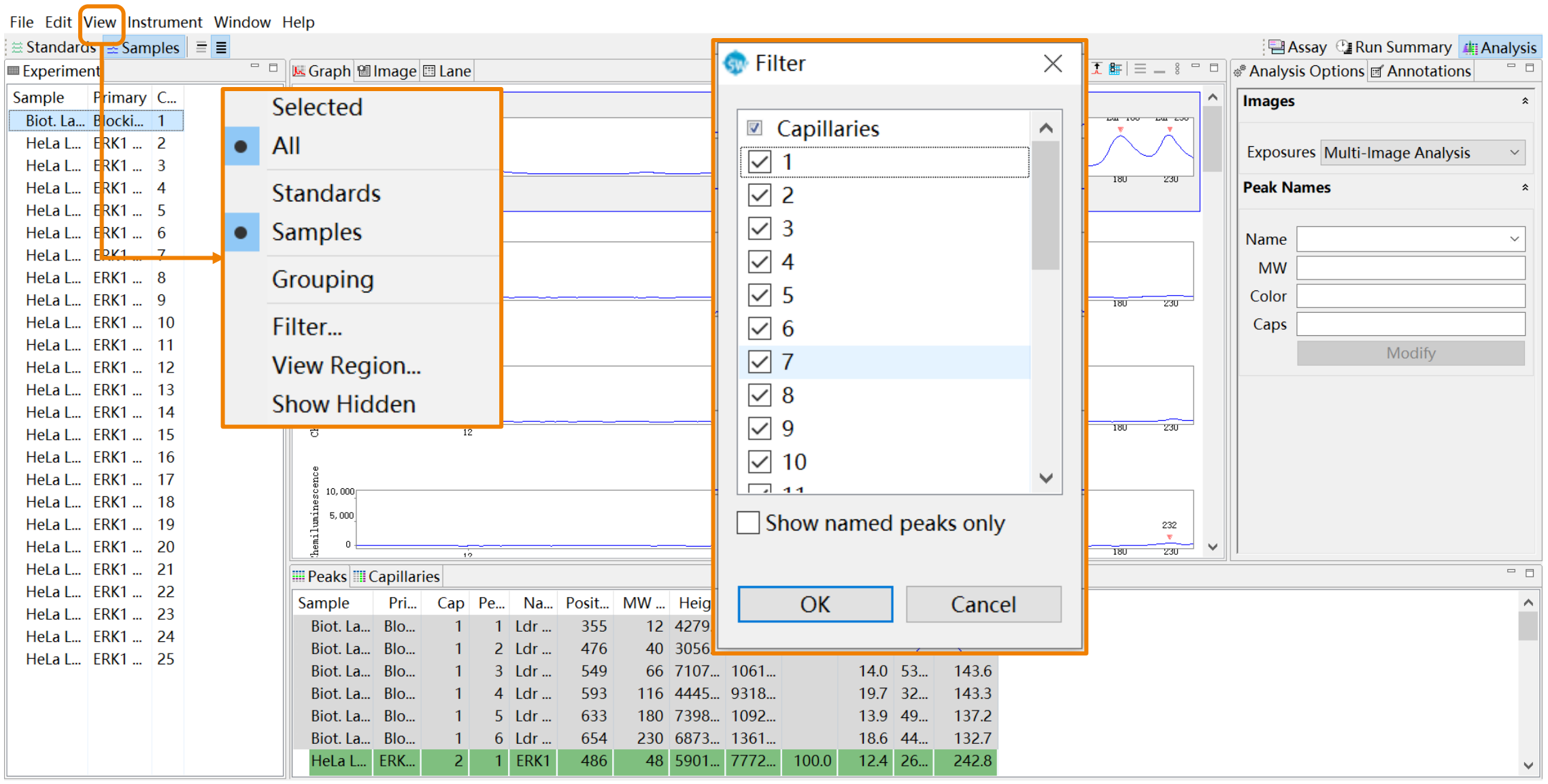

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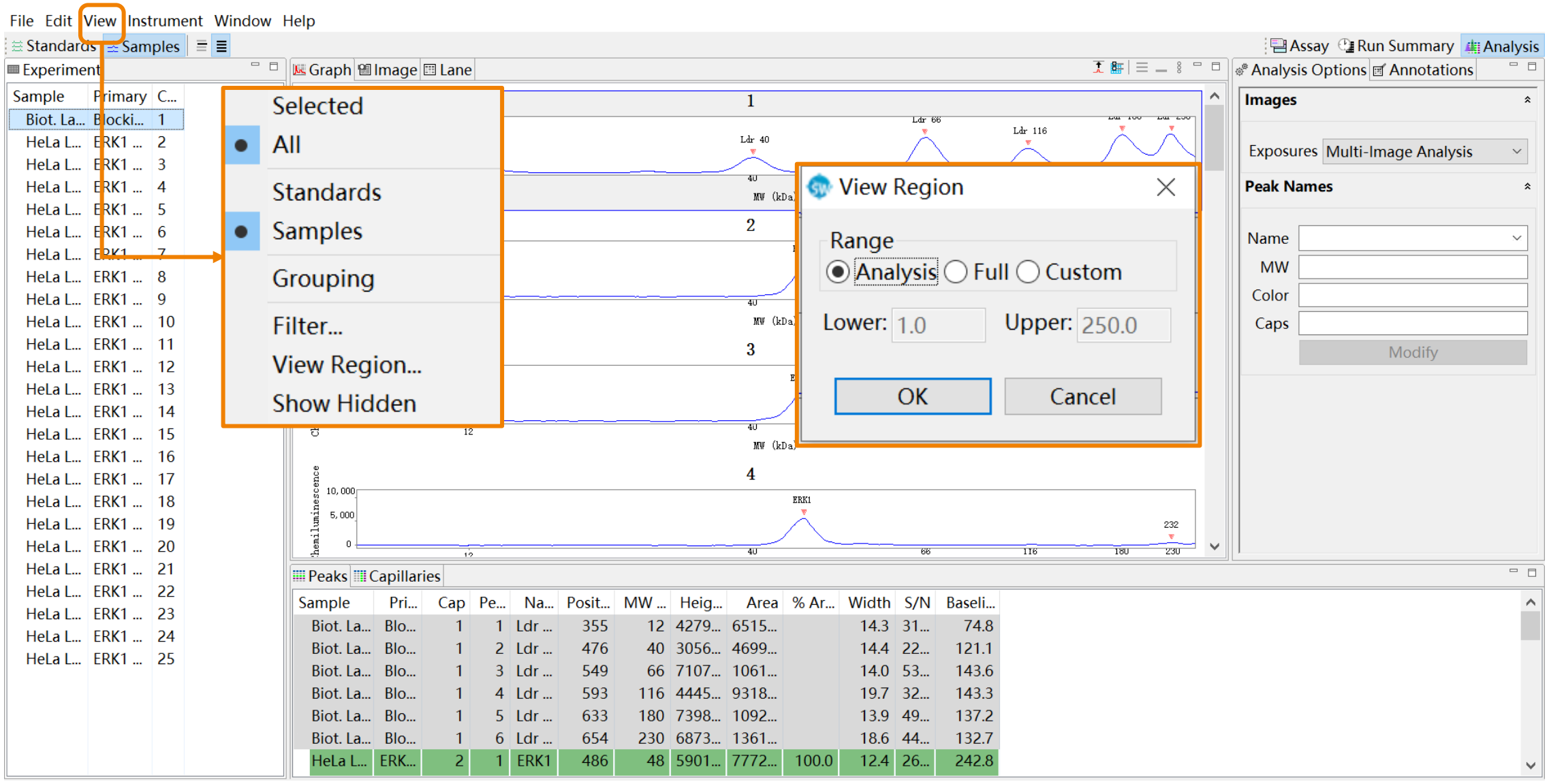

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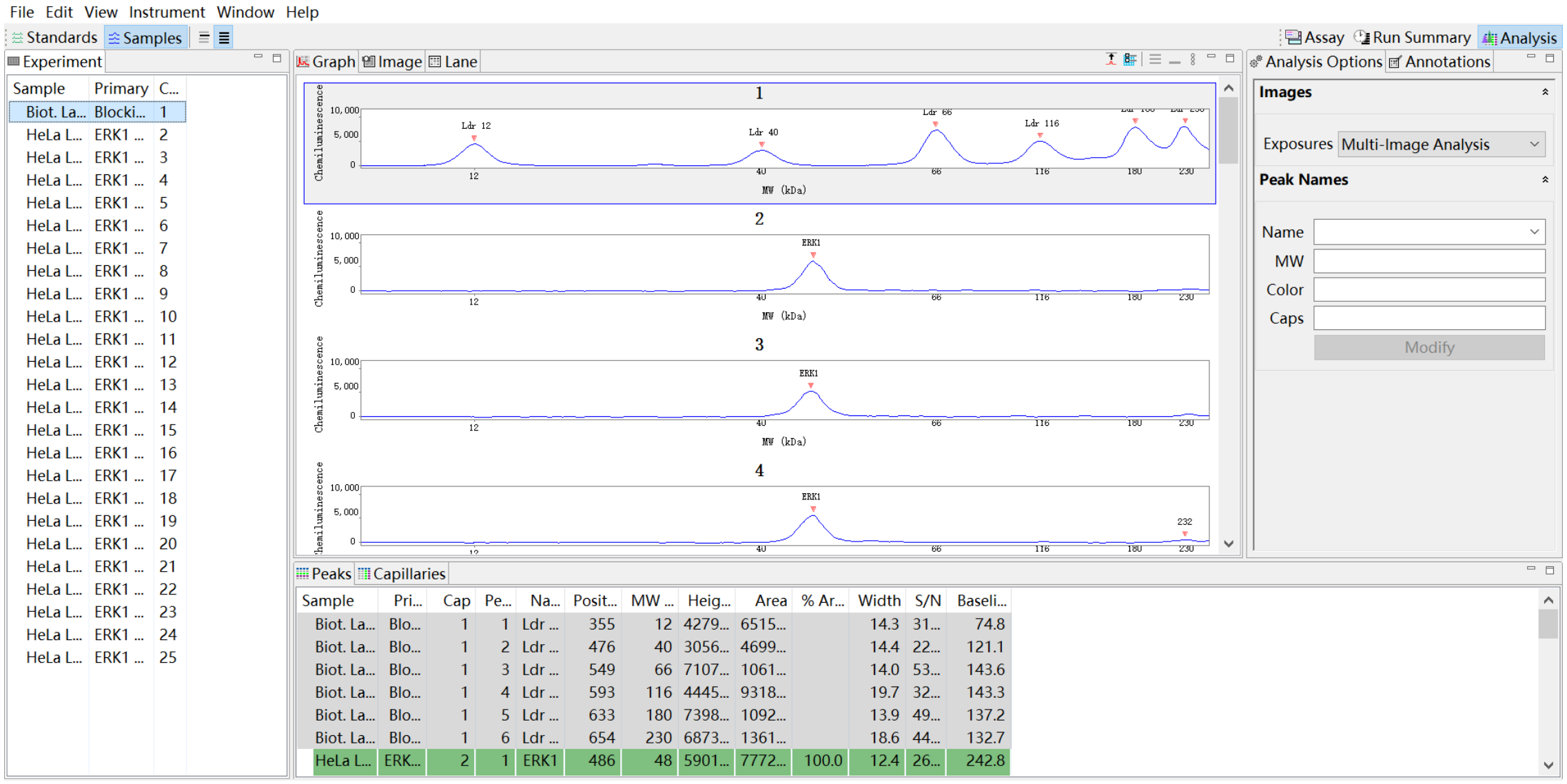

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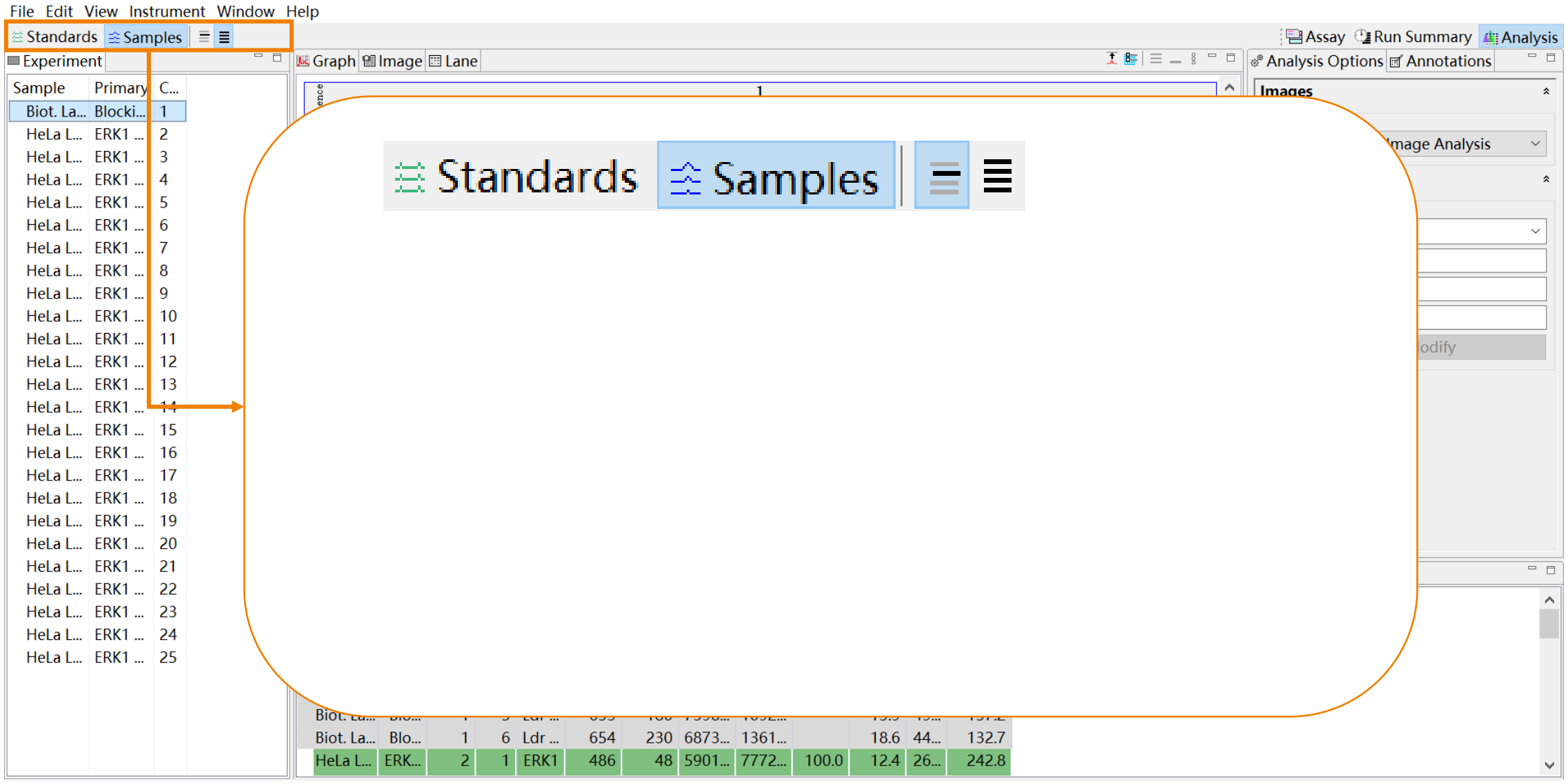
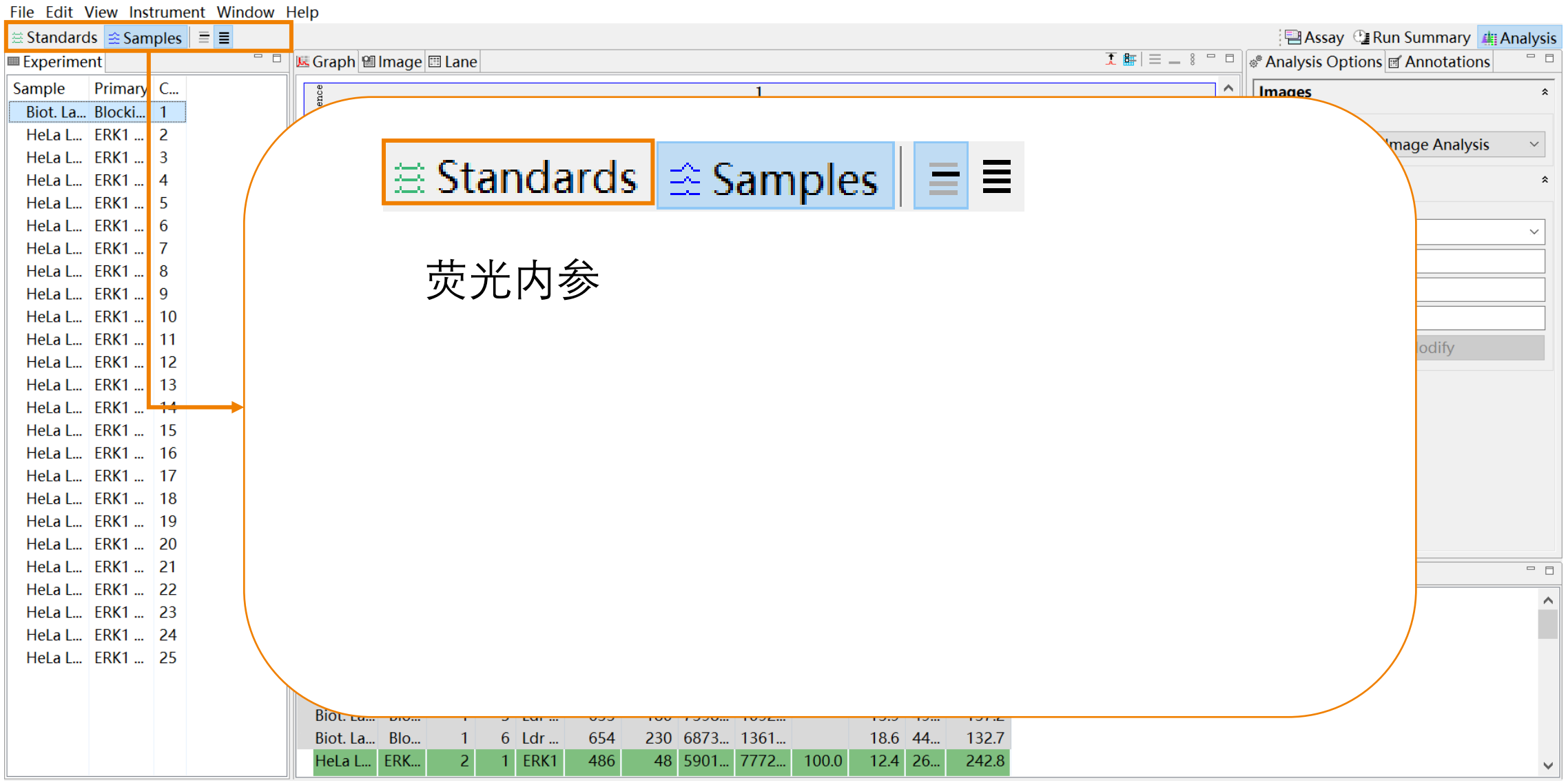
HeLa L...	ERK...	2	1	ERK1	486	48	5901...	7772...	100.0	12.4	26...	242.8

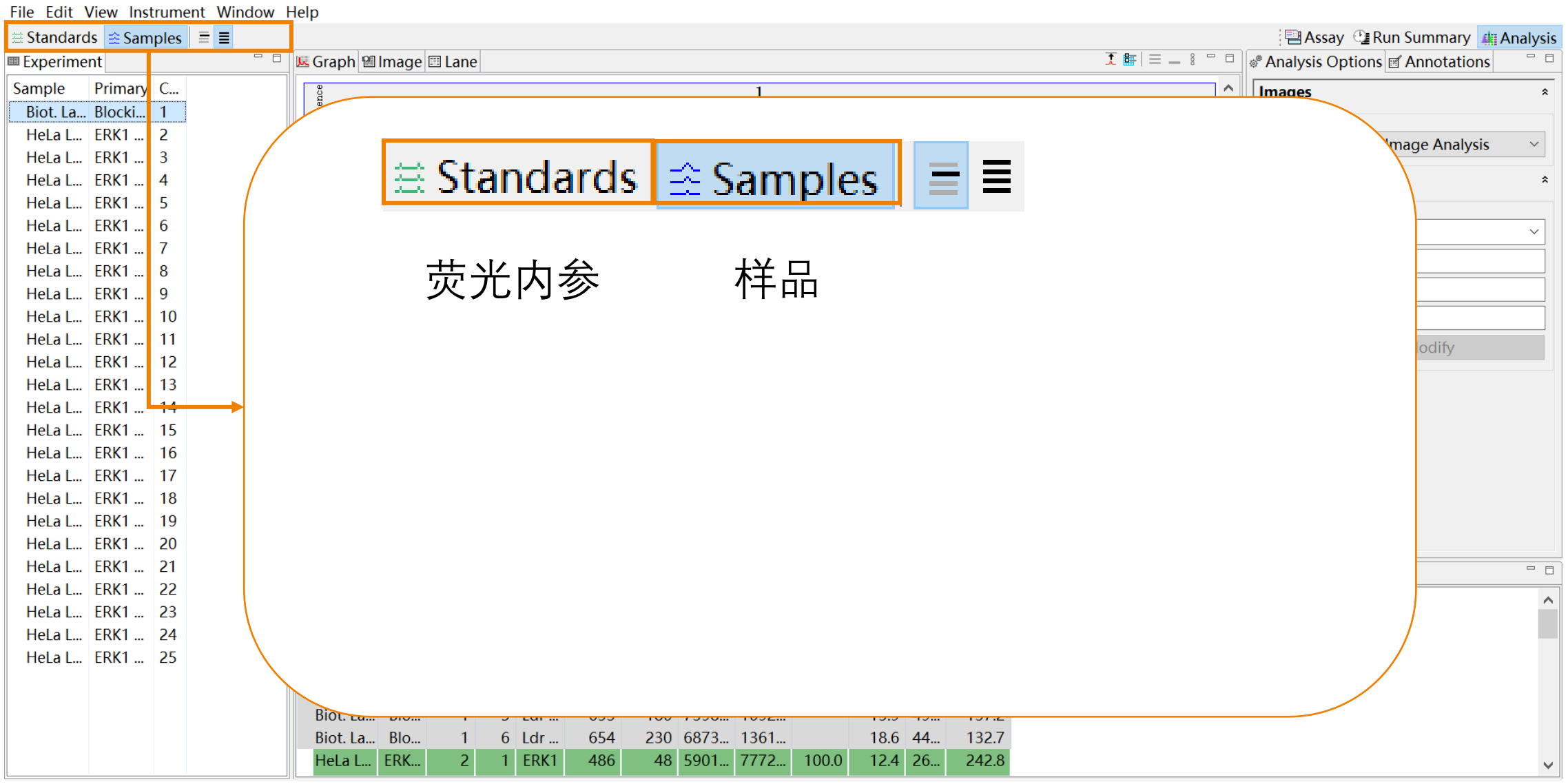
ANALYSIS 界面



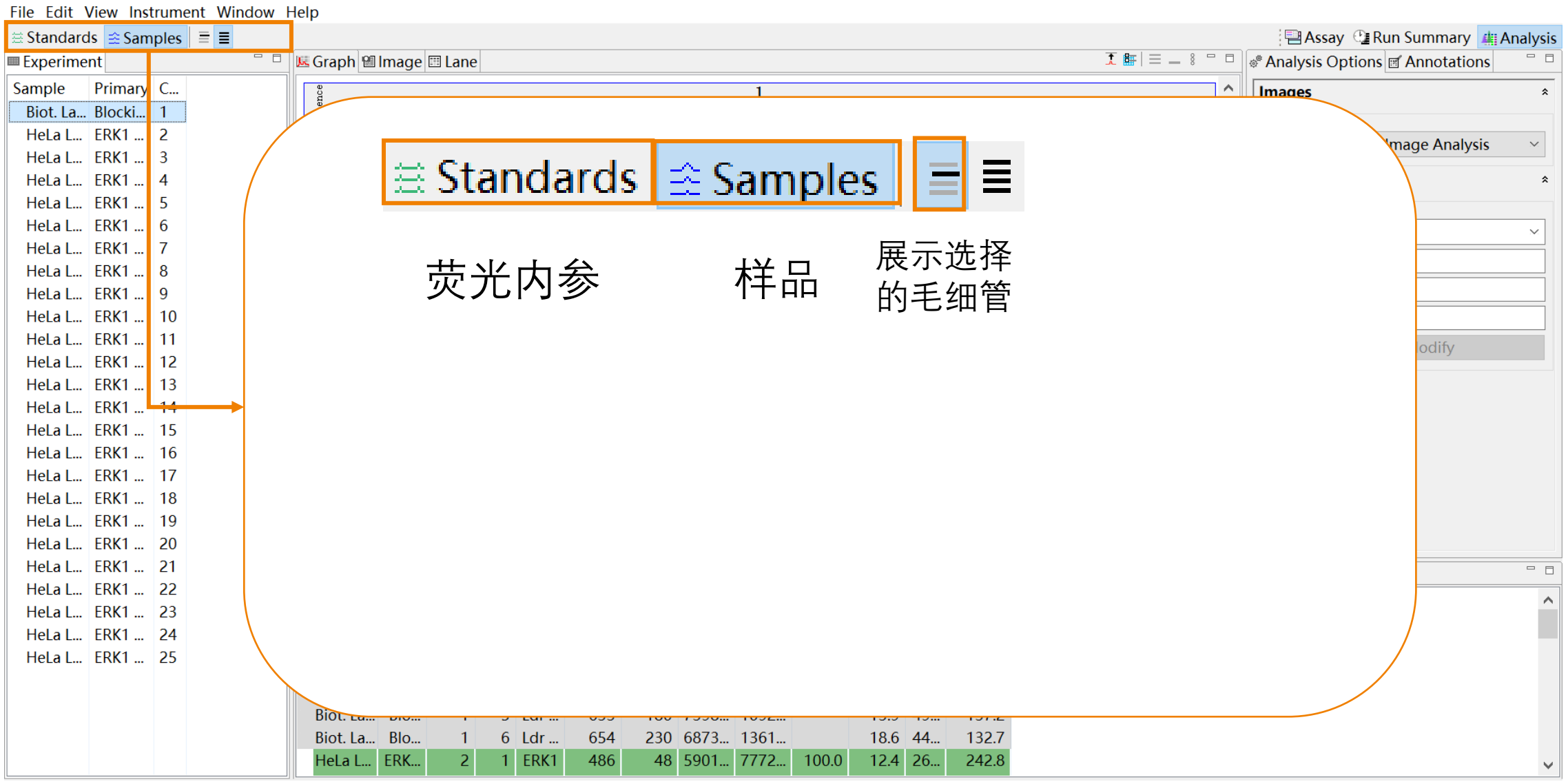
ANALYSIS 界面



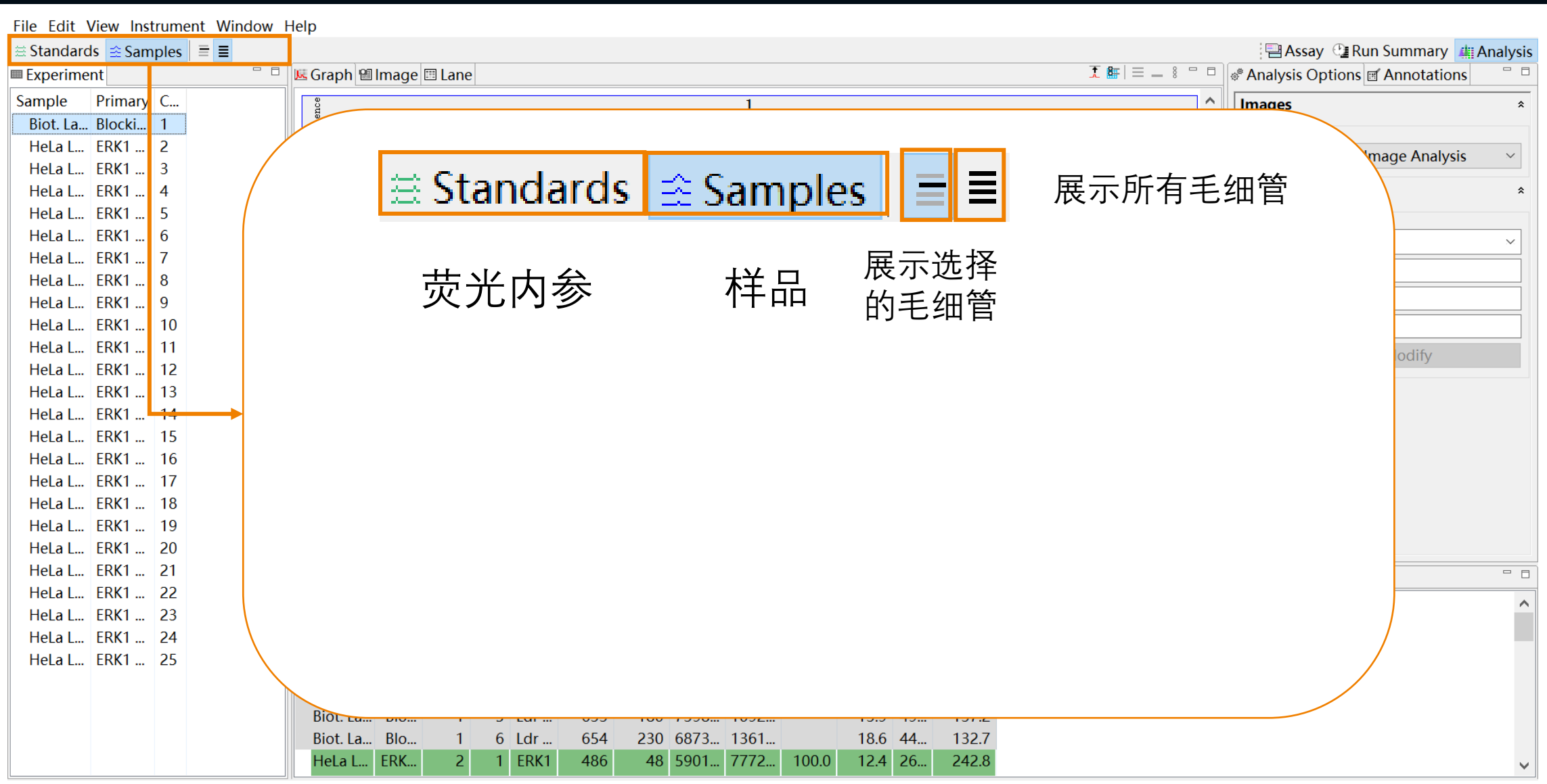
ANALYSIS 界面



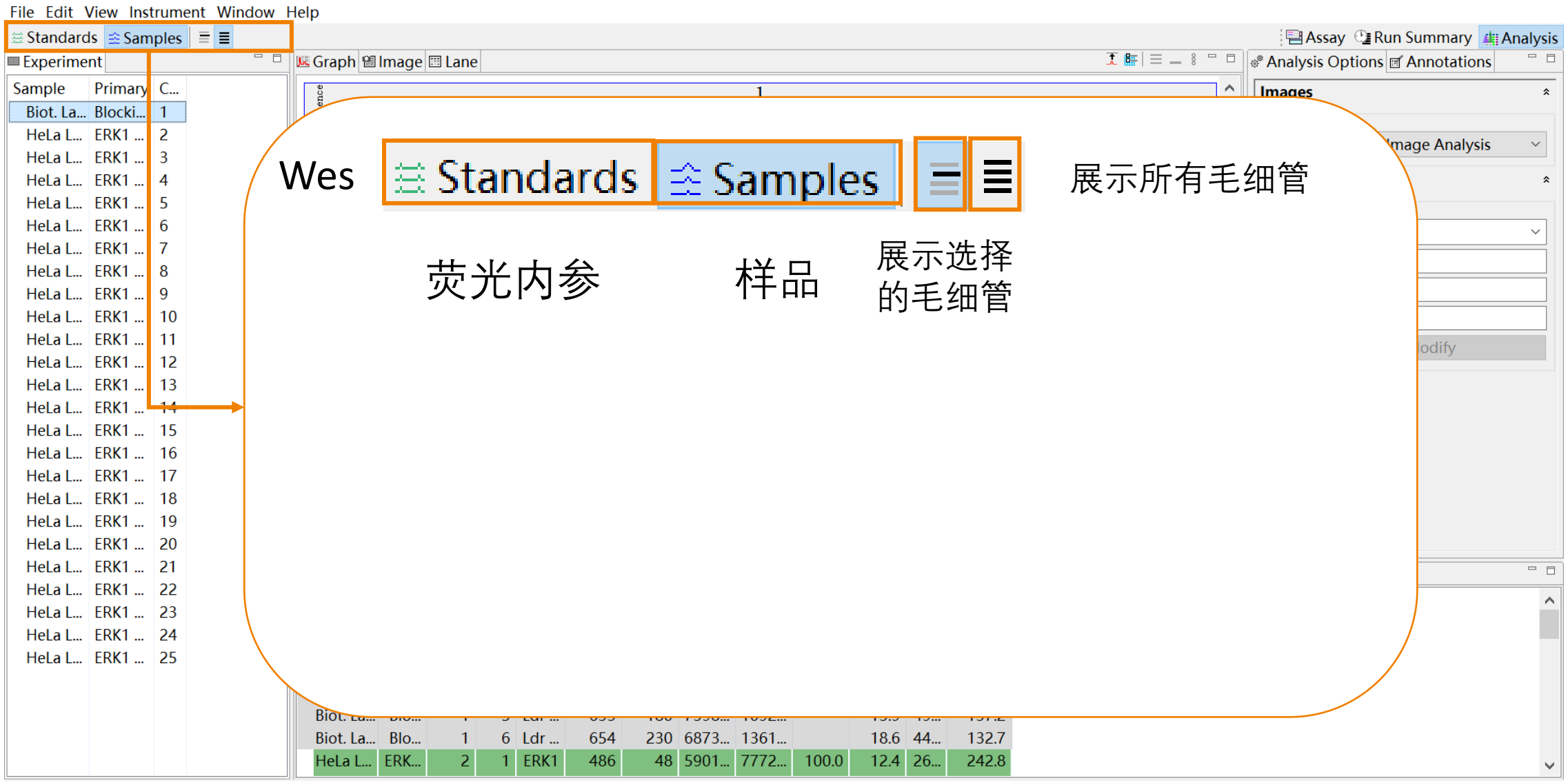
ANALYSIS 界面



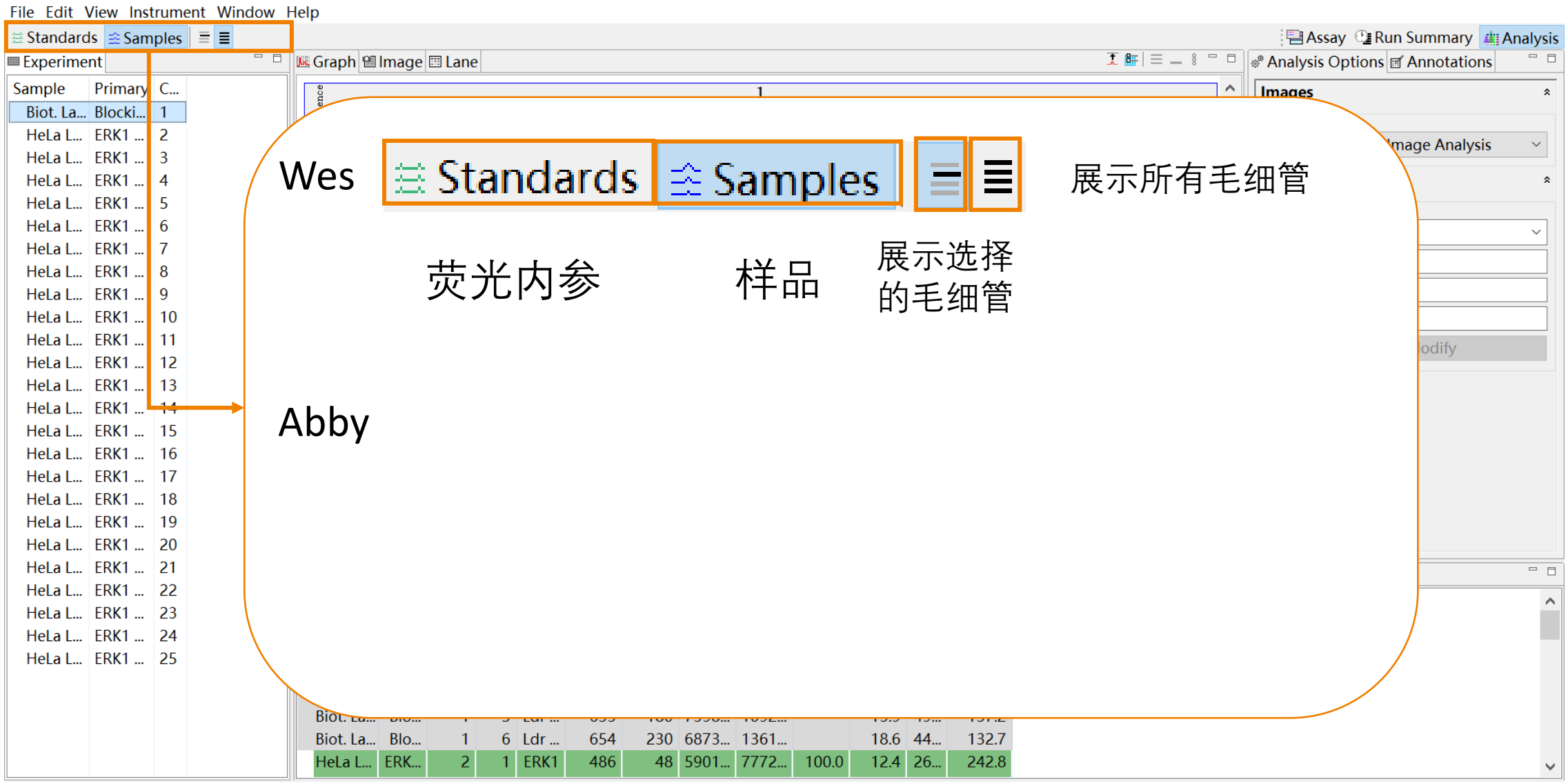
ANALYSIS 界面



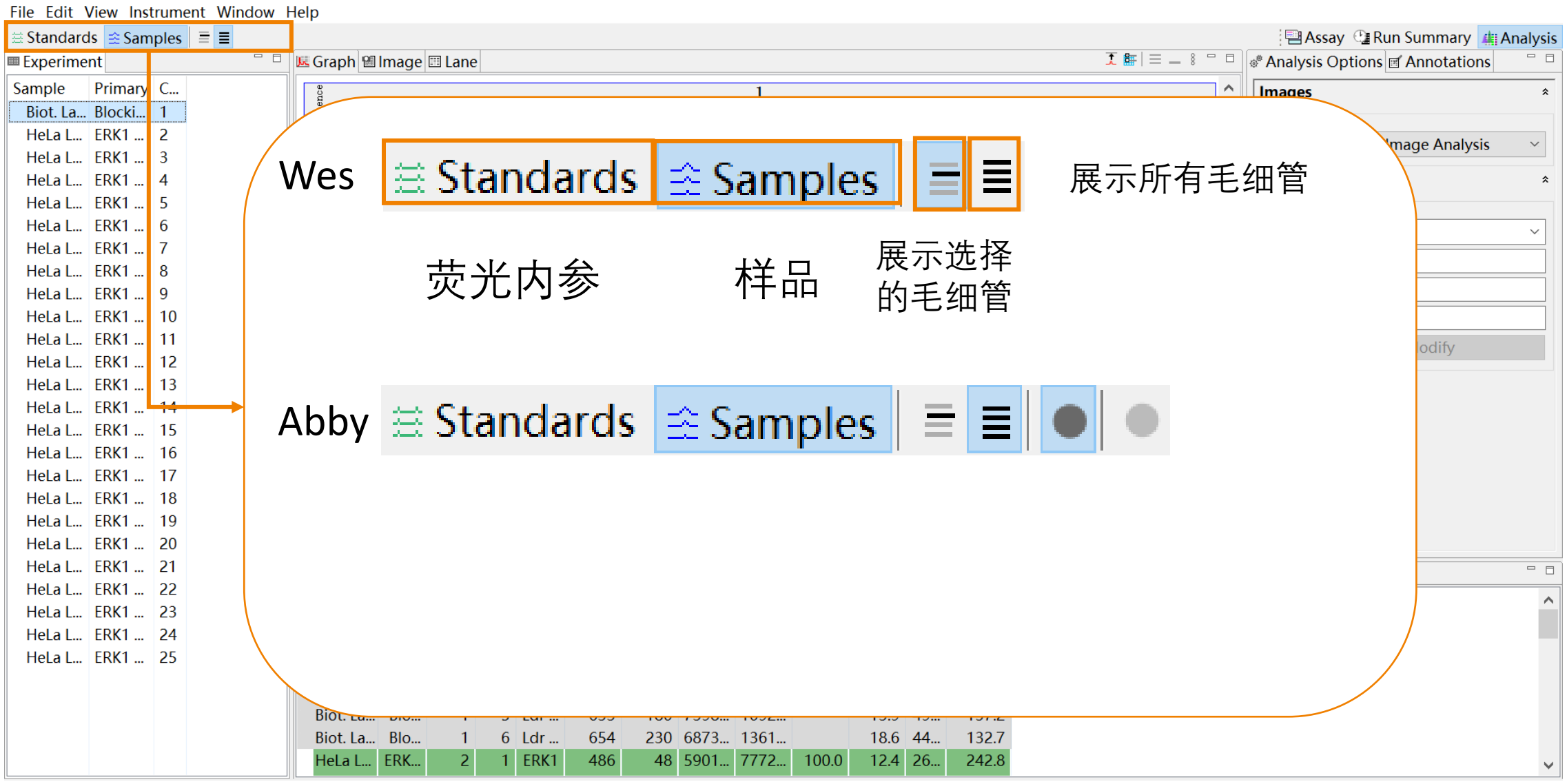
ANALYSIS 界面



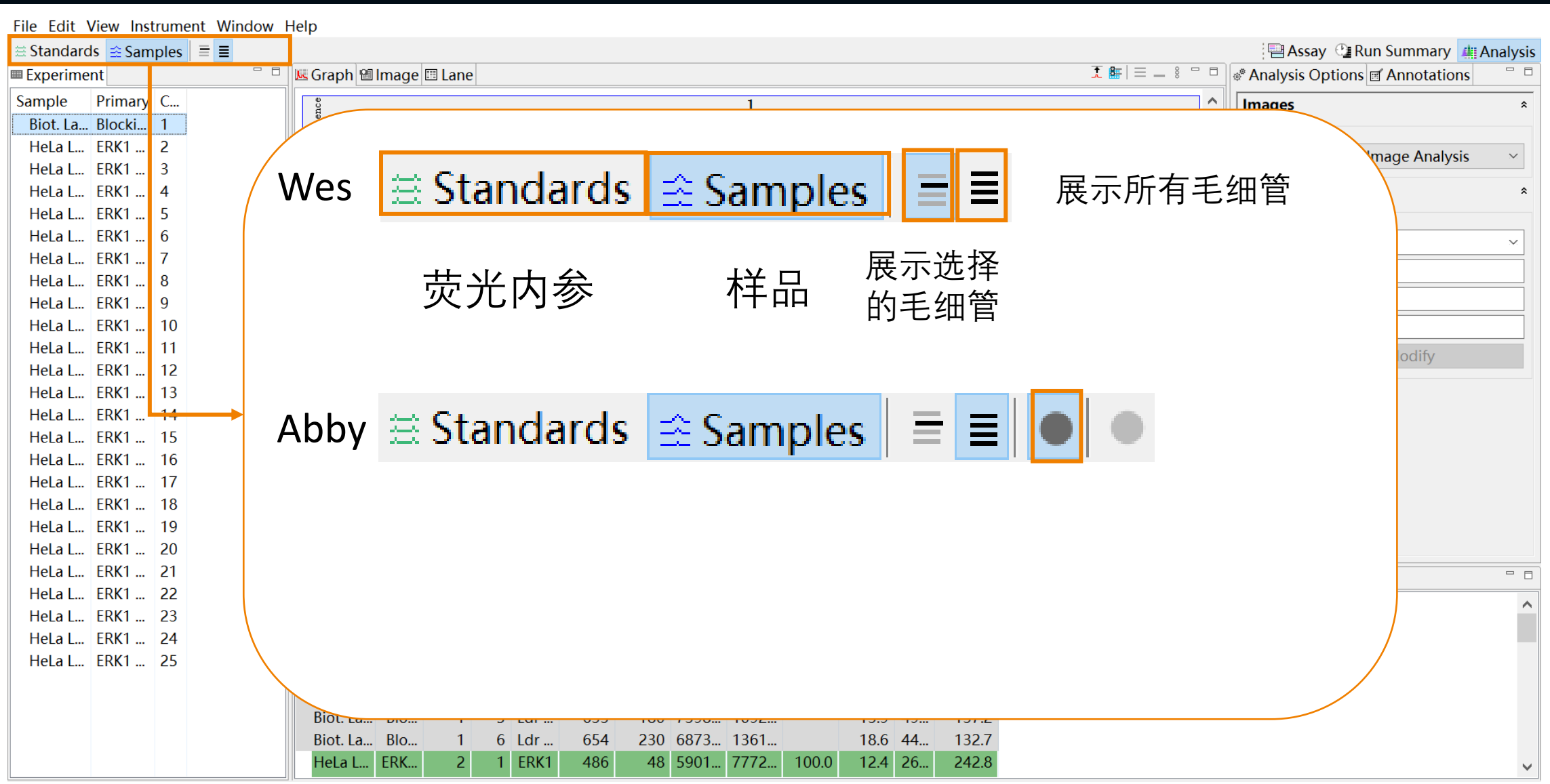
ANALYSIS 界面



ANALYSIS 界面



ANALYSIS 界面



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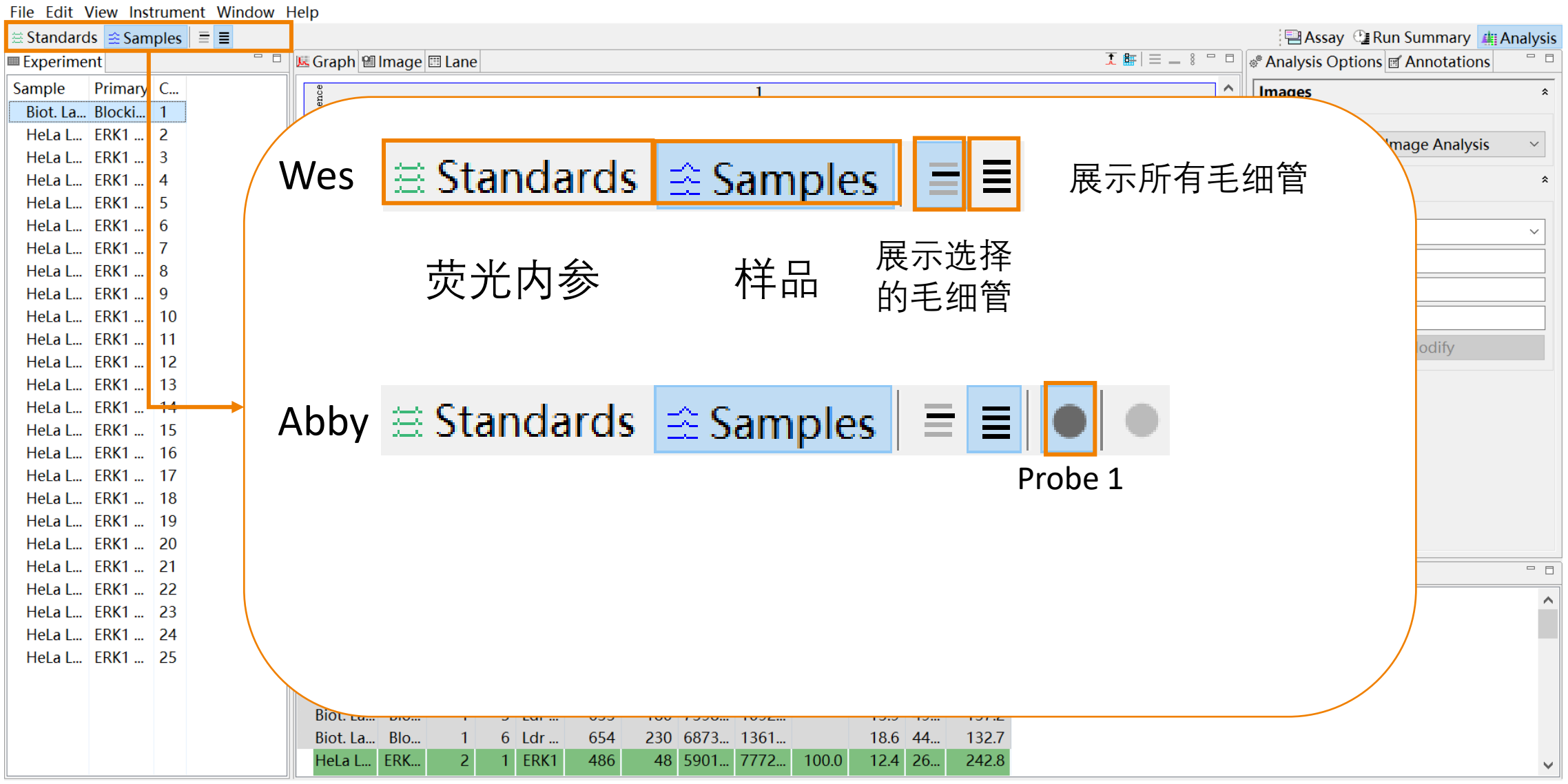
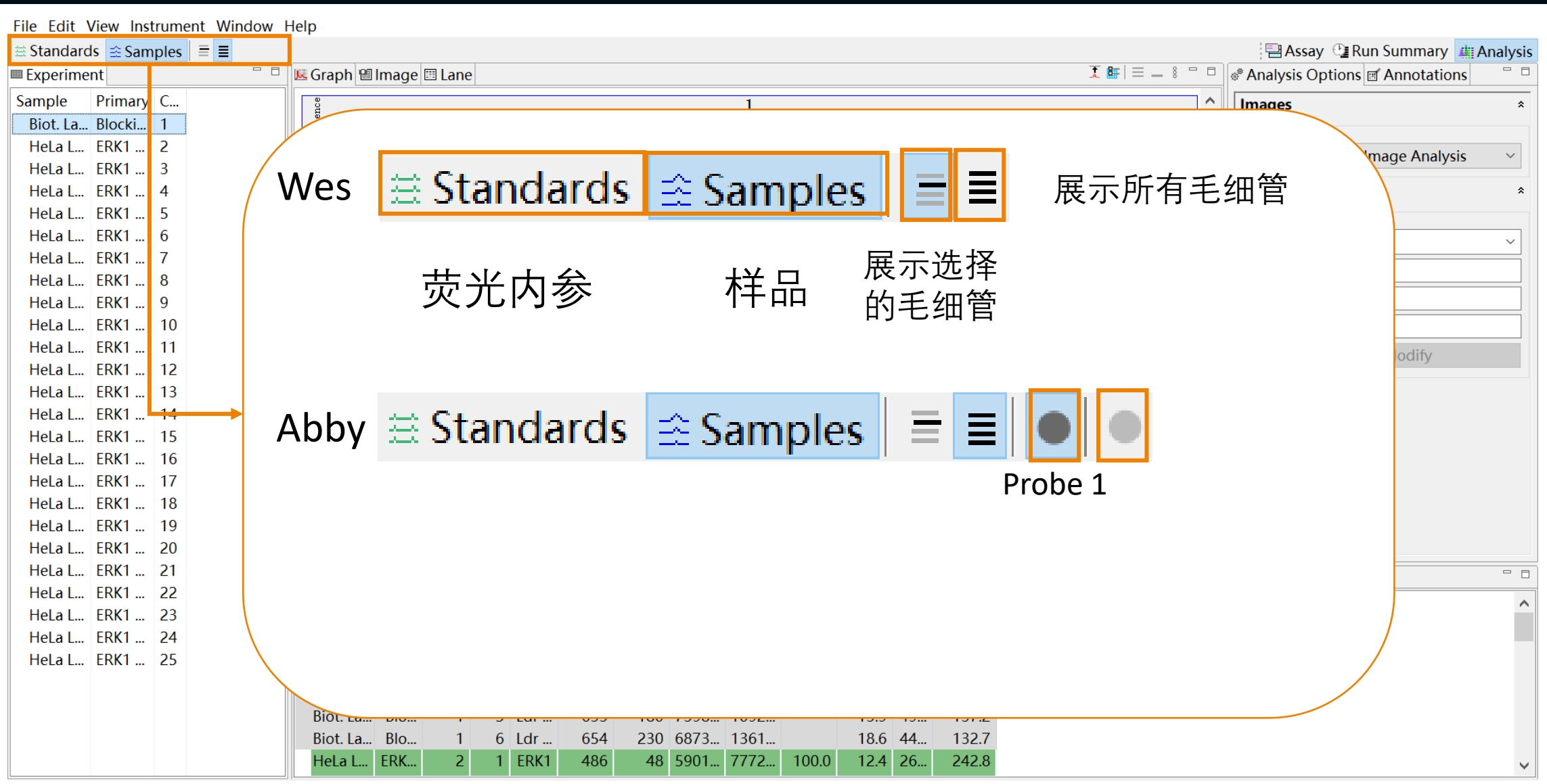


ANALYSIS 界面



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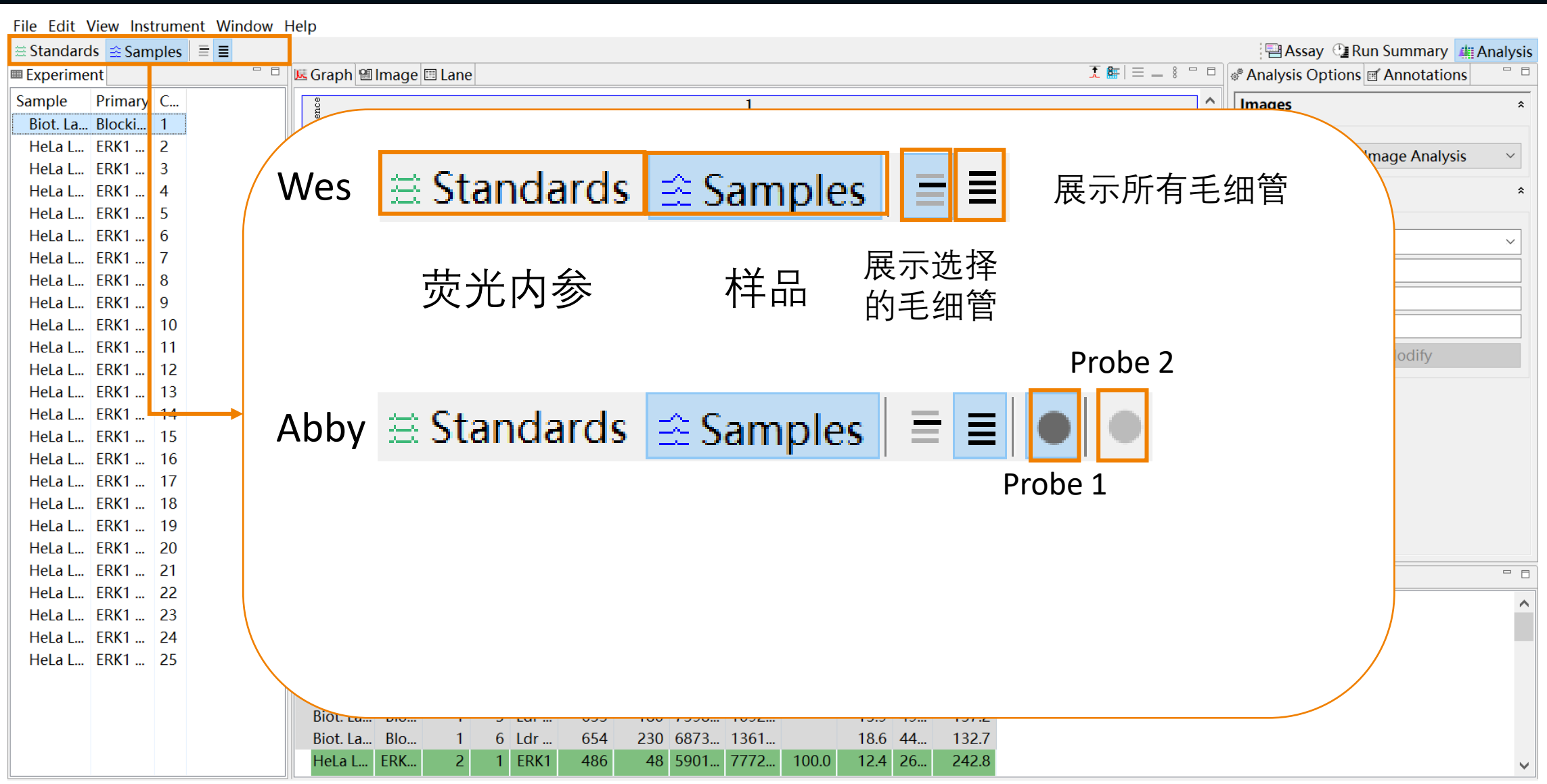

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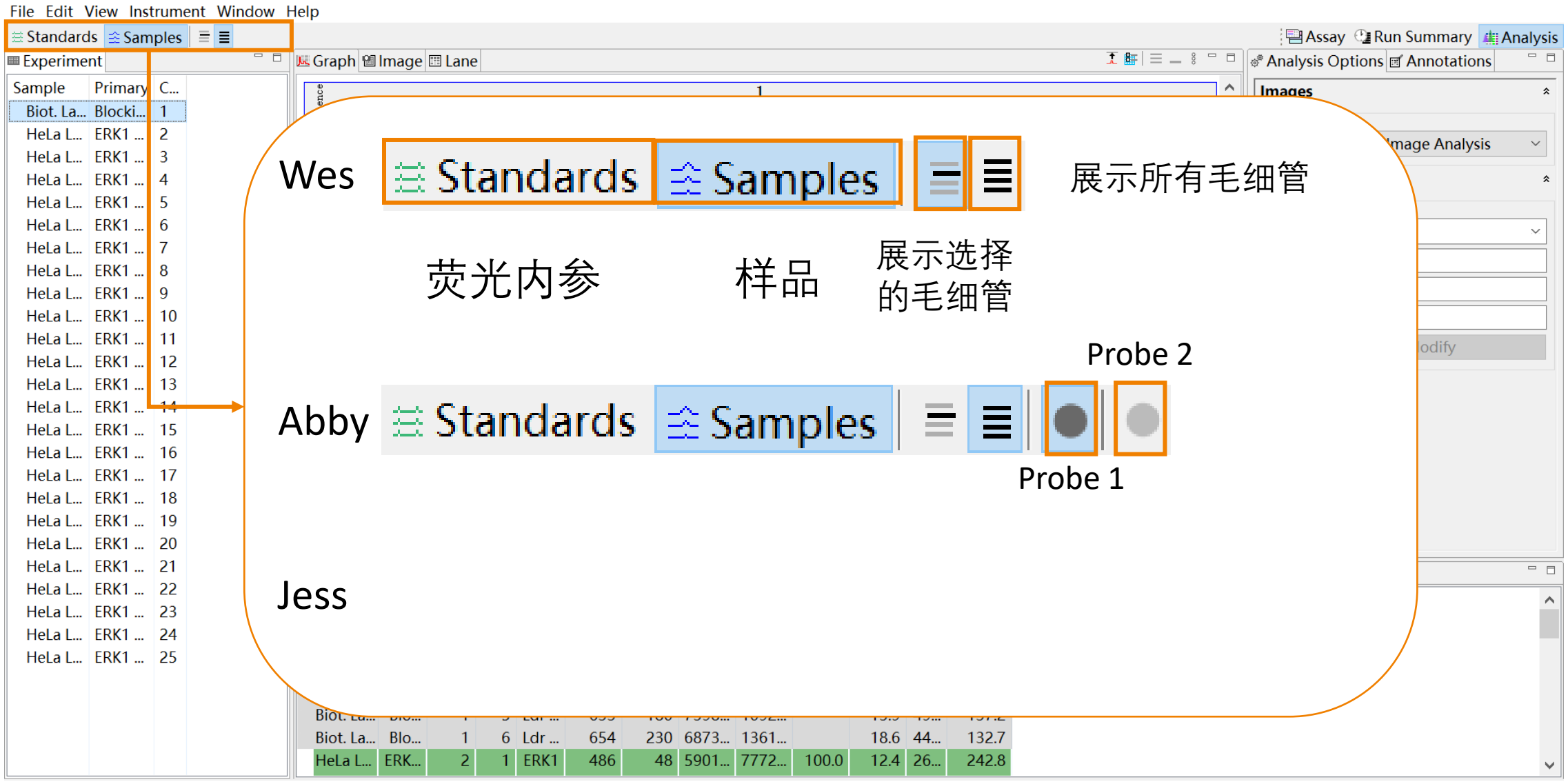

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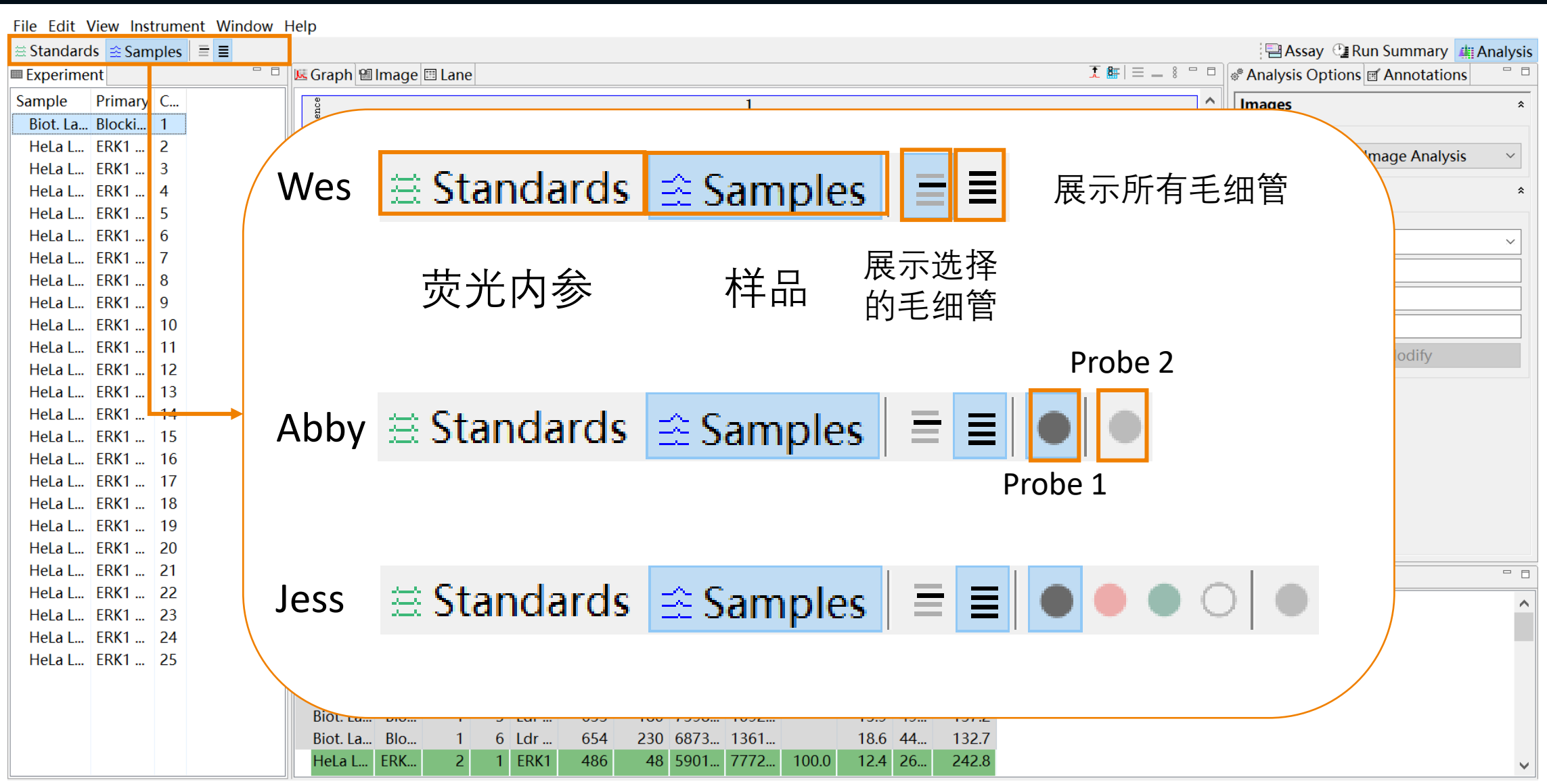

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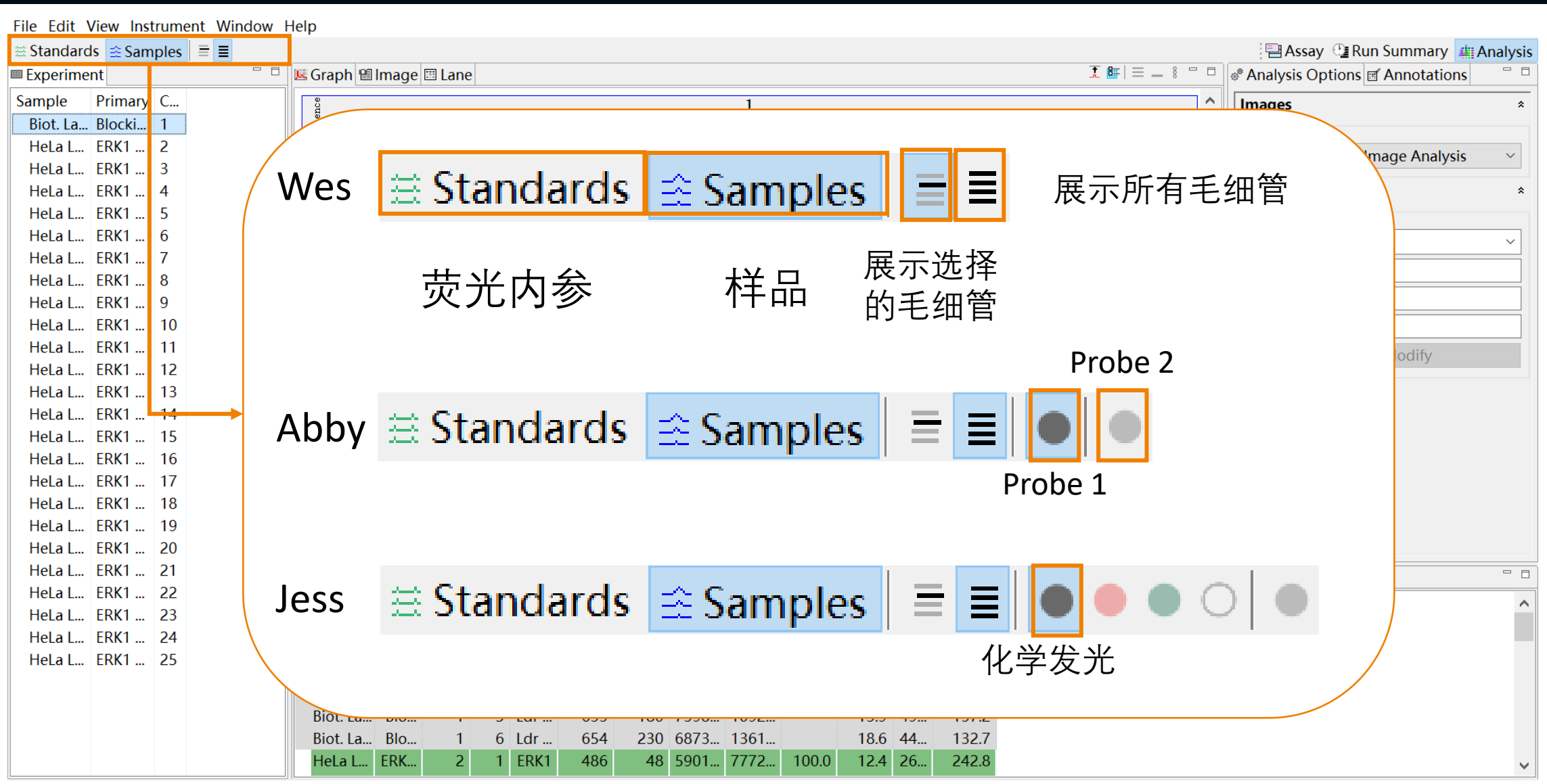
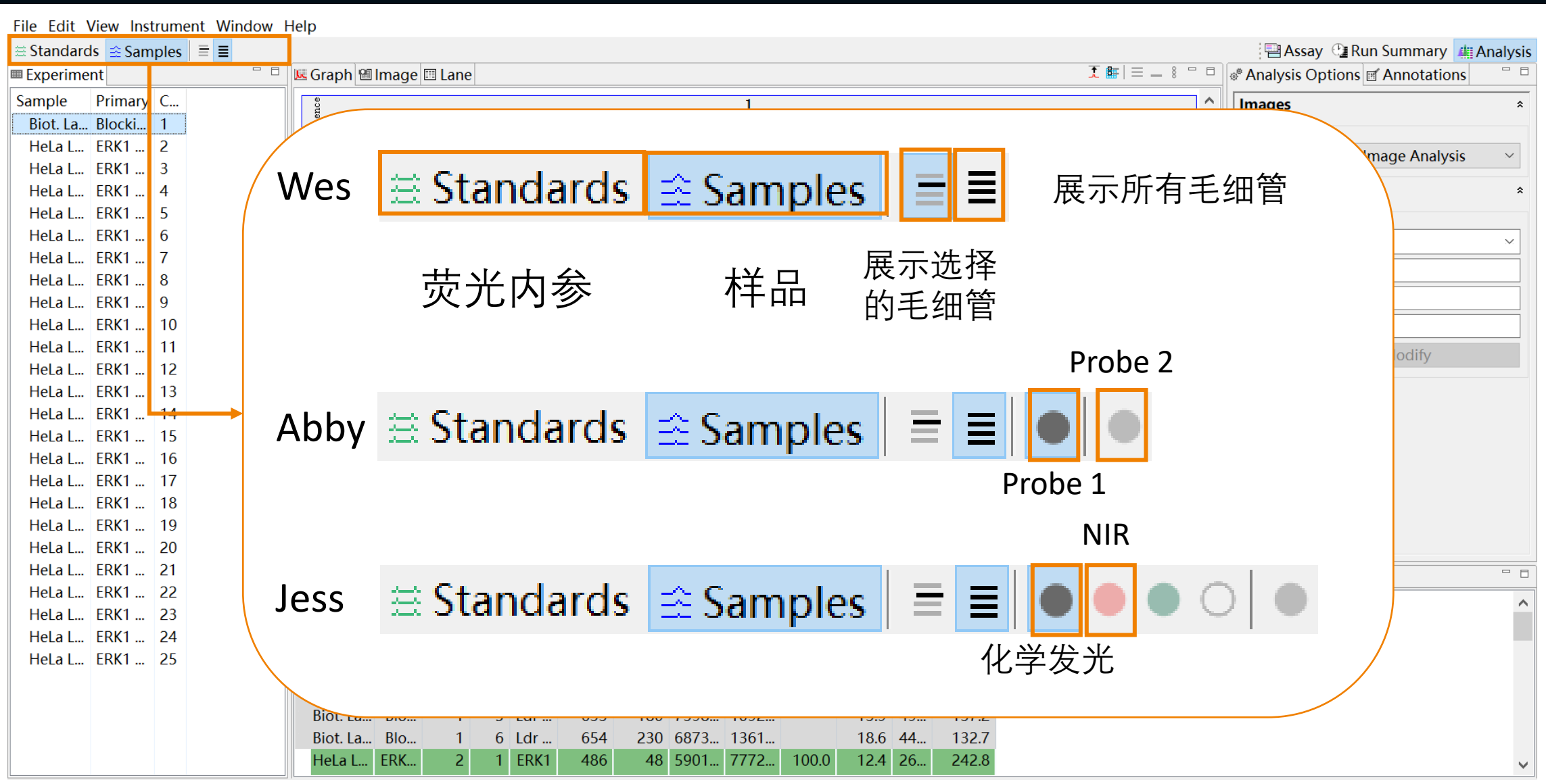
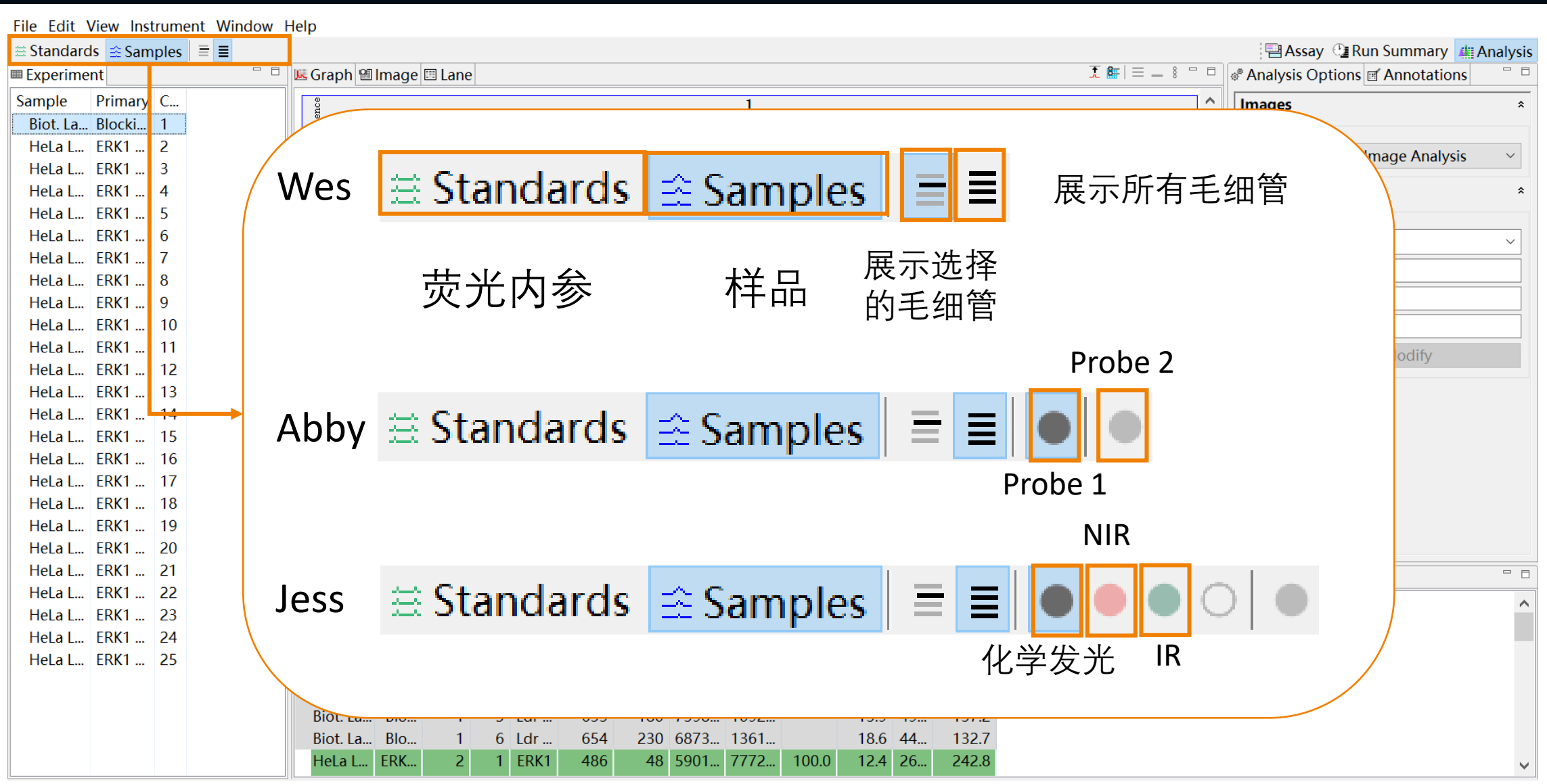


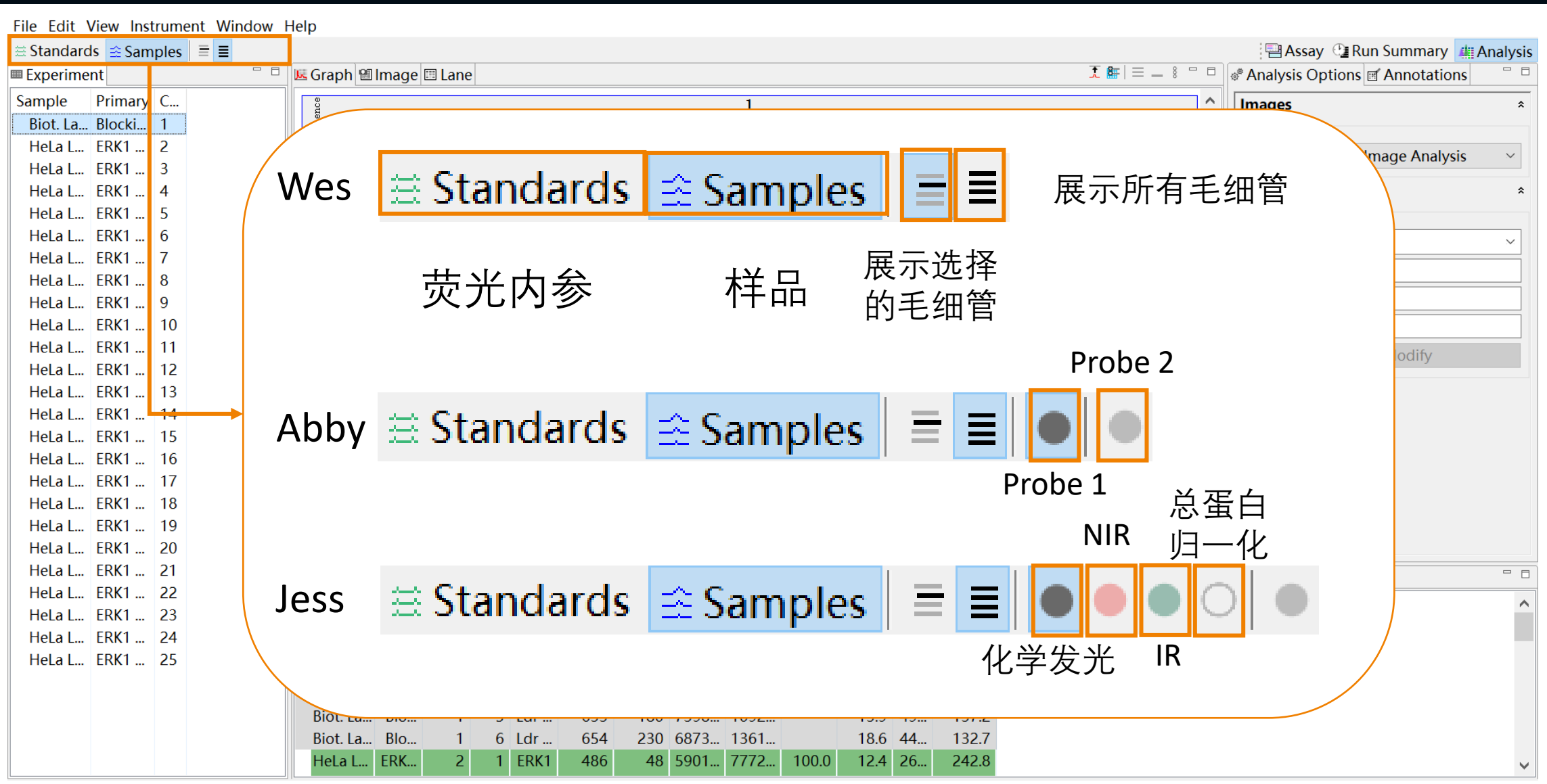
ANALYSIS 界面



ANALYSIS 界面



ANALYSIS 界面



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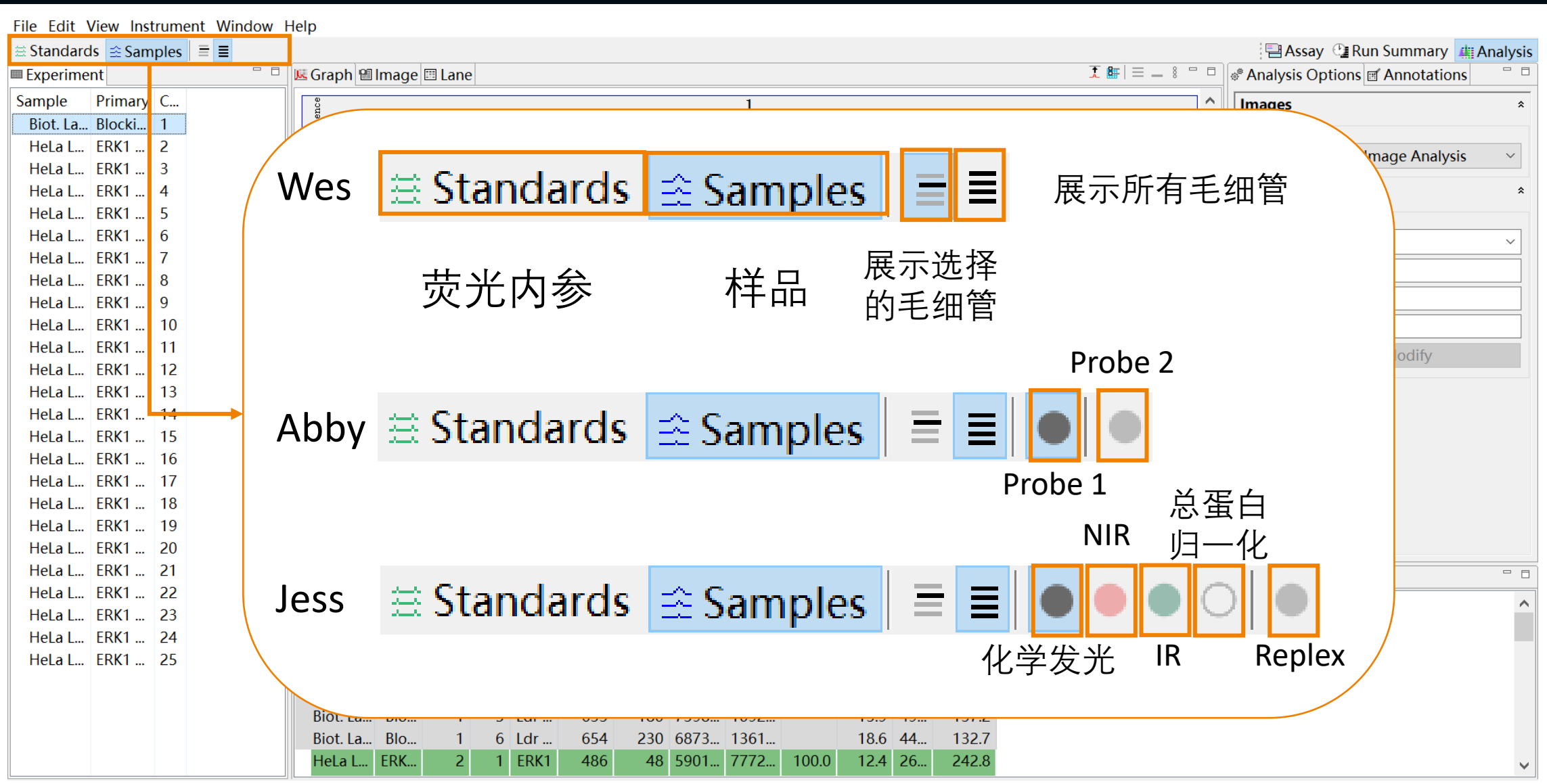
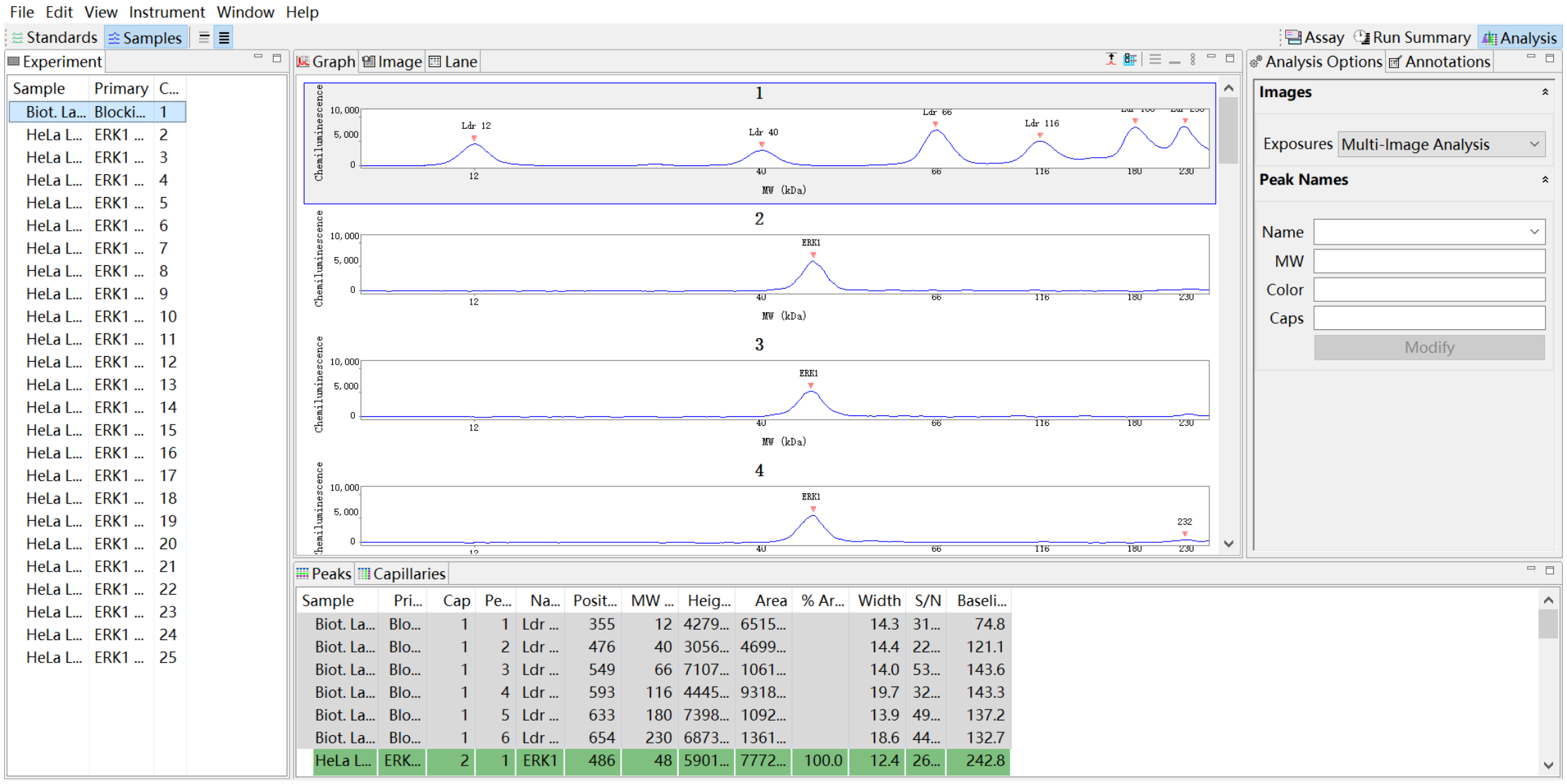


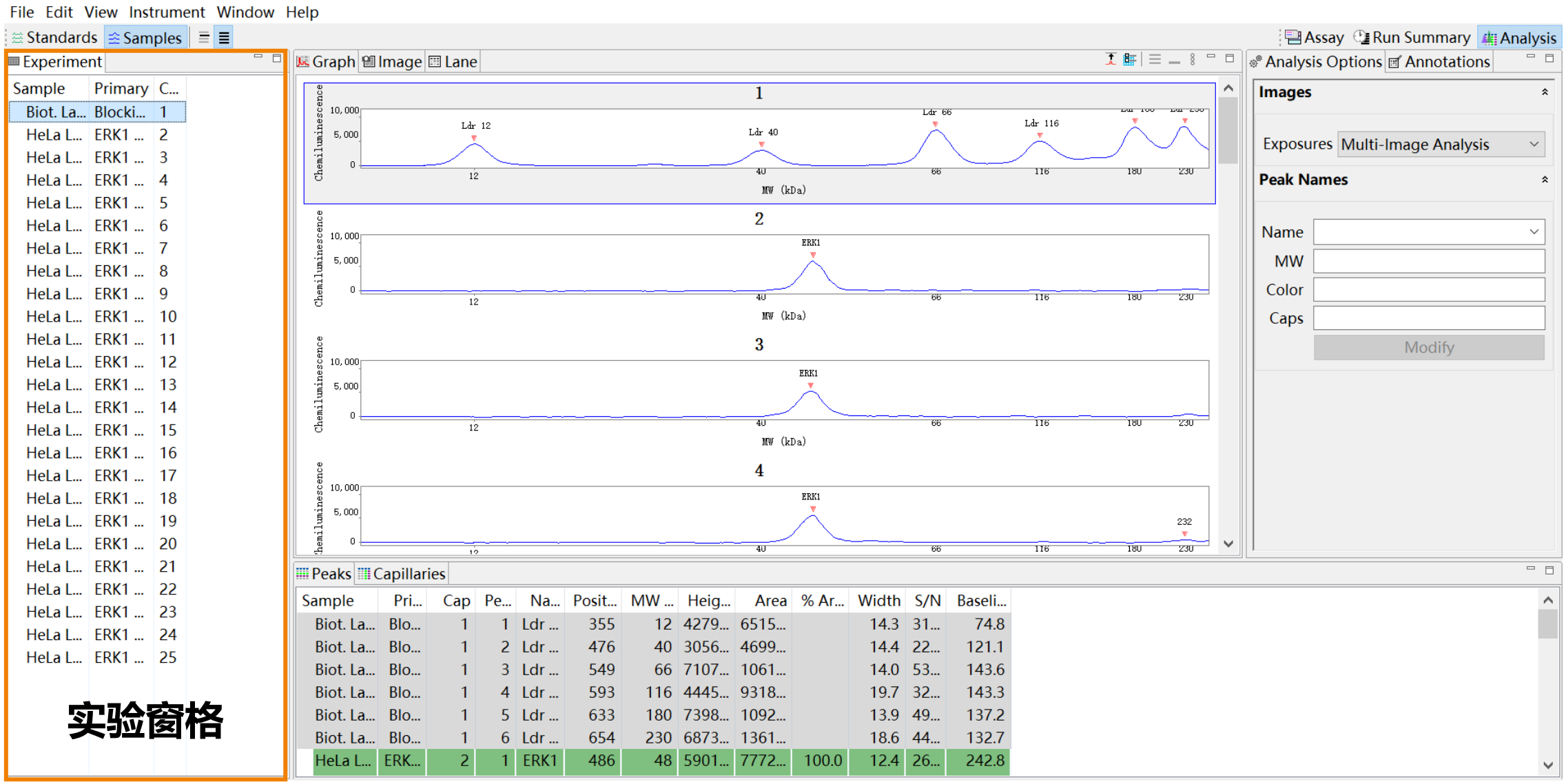
ANALYSIS 界面



Sample	Primary	C...
Biot. La...	Blocki...	1
HeLa L...	ERK1 ...	2
HeLa L...	ERK1 ...	3
HeLa L...	ERK1 ...	4
HeLa L...	ERK1 ...	5
HeLa L...	ERK1 ...	6
HeLa L...	ERK1 ...	7
HeLa L...	ERK1 ...	8
HeLa L...	ERK1 ...	9
HeLa L...	ERK1 ...	10
HeLa L...	ERK1 ...	11
HeLa L...	ERK1 ...	12
HeLa L...	ERK1 ...	13
HeLa L...	ERK1 ...	14
HeLa L...	ERK1 ...	15
HeLa L...	ERK1 ...	16
HeLa L...	ERK1 ...	17
HeLa L...	ERK1 ...	18
HeLa L...	ERK1 ...	19
HeLa L...	ERK1 ...	20
HeLa L...	ERK1 ...	21
HeLa L...	ERK1 ...	22
HeLa L...	ERK1 ...	23
HeLa L...	ERK1 ...	24
HeLa L...	ERK1 ...	25

Sample	Pri...	Cap	Pe...	Na...	Posit...	MW ...	Heig...	Area	% Ar...	Width	S/N	Baseli...
Biot. La...	Blo...	1	1	Ldr ...	355	12	4279...	6515...		14.3	31...	74.8
Biot. La...	Blo...	1	2	Ldr ...	476	40	3056...	4699...		14.4	22...	121.1
Biot. La...	Blo...	1	3	Ldr ...	549	66	7107...	1061...		14.0	53...	143.6
Biot. La...	Blo...	1	4	Ldr ...	593	116	4445...	9318...		19.7	32...	143.3
Biot. La...	Blo...	1	5	Ldr ...	633	180	7398...	1092...		13.9	49...	137.2
Biot. La...	Blo...	1	6	Ldr ...	654	230	6873...	1361...		18.6	44...	132.7
HeLa L...	ERK...	2	1	ERK1	486	48	5901...	7772...	100.0	12.4	26...	242.8

ANALYSIS 界面

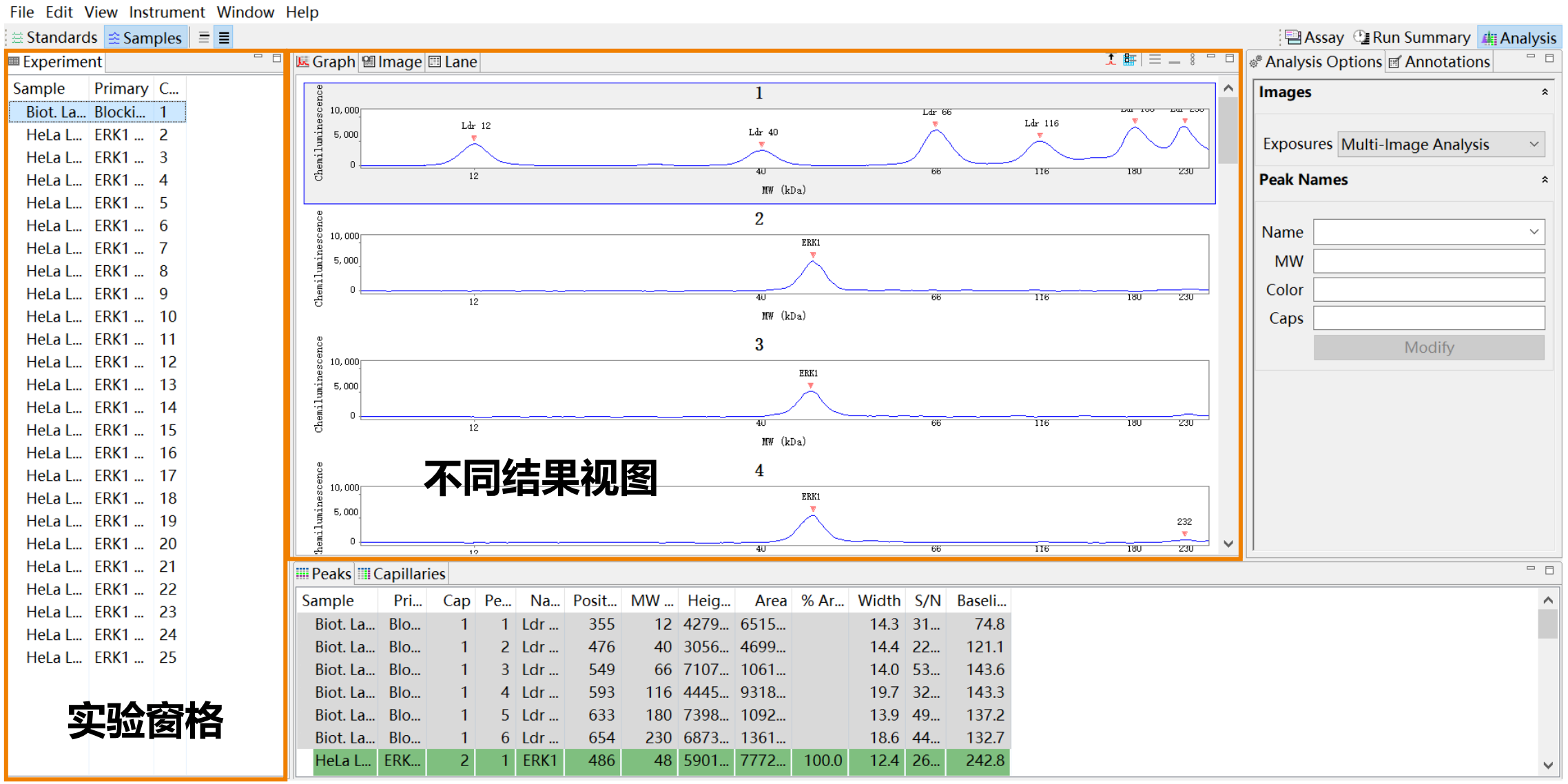


Sample	Primary	C...
Biot. La...	Blocki...	1
HeLa L...	ERK1 ...	2
HeLa L...	ERK1 ...	3
HeLa L...	ERK1 ...	4
HeLa L...	ERK1 ...	5
HeLa L...	ERK1 ...	6
HeLa L...	ERK1 ...	7
HeLa L...	ERK1 ...	8
HeLa L...	ERK1 ...	9
HeLa L...	ERK1 ...	10
HeLa L...	ERK1 ...	11
HeLa L...	ERK1 ...	12
HeLa L...	ERK1 ...	13
HeLa L...	ERK1 ...	14
HeLa L...	ERK1 ...	15
HeLa L...	ERK1 ...	16
HeLa L...	ERK1 ...	17
HeLa L...	ERK1 ...	18
HeLa L...	ERK1 ...	19
HeLa L...	ERK1 ...	20
HeLa L...	ERK1 ...	21
HeLa L...	ERK1 ...	22
HeLa L...	ERK1 ...	23
HeLa L...	ERK1 ...	24
HeLa L...	ERK1 ...	25

实验窗格

Sample	Pri...	Cap	Pe...	Na...	Posit...	MW ...	Heig...	Area	% Ar...	Width	S/N	Baseli...
Biot. La...	Blo...	1	1	Ldr ...	355	12	4279...	6515...		14.3	31...	74.8
Biot. La...	Blo...	1	2	Ldr ...	476	40	3056...	4699...		14.4	22...	121.1
Biot. La...	Blo...	1	3	Ldr ...	549	66	7107...	1061...		14.0	53...	143.6
Biot. La...	Blo...	1	4	Ldr ...	593	116	4445...	9318...		19.7	32...	143.3
Biot. La...	Blo...	1	5	Ldr ...	633	180	7398...	1092...		13.9	49...	137.2
Biot. La...	Blo...	1	6	Ldr ...	654	230	6873...	1361...		18.6	44...	132.7
HeLa L...	ERK...	2	1	ERK1	486	48	5901...	7772...	100.0	12.4	26...	242.8

ANALYSIS 界面



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Biot. La...	Blocki...	1
HeLa L...	ERK1 ...	2
HeLa L...	ERK1 ...	3
HeLa L...	ERK1 ...	4
HeLa L...	ERK1 ...	5
HeLa L...	ERK1 ...	6
HeLa L...	ERK1 ...	7
HeLa L...	ERK1 ...	8
HeLa L...	ERK1 ...	9
HeLa L...	ERK1 ...	10
HeLa L...	ERK1 ...	11
HeLa L...	ERK1 ...	12
HeLa L...	ERK1 ...	13
HeLa L...	ERK1 ...	14
HeLa L...	ERK1 ...	15
HeLa L...	ERK1 ...	16
HeLa L...	ERK1 ...	17
HeLa L...	ERK1 ...	18
HeLa L...	ERK1 ...	19
HeLa L...	ERK1 ...	20
HeLa L...	ERK1 ...	21
HeLa L...	ERK1 ...	22
HeLa L...	ERK1 ...	23
HeLa L...	ERK1 ...	24
HeLa L...	ERK1 ...	25

Sample	Pri...	Cap	Pe...	Na...	Posit...	MW ...	Heig...	Area	% Ar...	Width	S/N	Baseli...
Biot. La...	Blo...	1	1	Ldr ...	355	12	4279...	6515...		14.3	31...	74.8
Biot. La...	Blo...	1	2	Ldr ...	476	40	3056...	4699...		14.4	22...	121.1
Biot. La...	Blo...	1	3	Ldr ...	549	66	7107...	1061...		14.0	53...	143.6
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Biot. La...	Blo...	1	5	Ldr ...	633	180	7398...	1092...		13.9	49...	137.2
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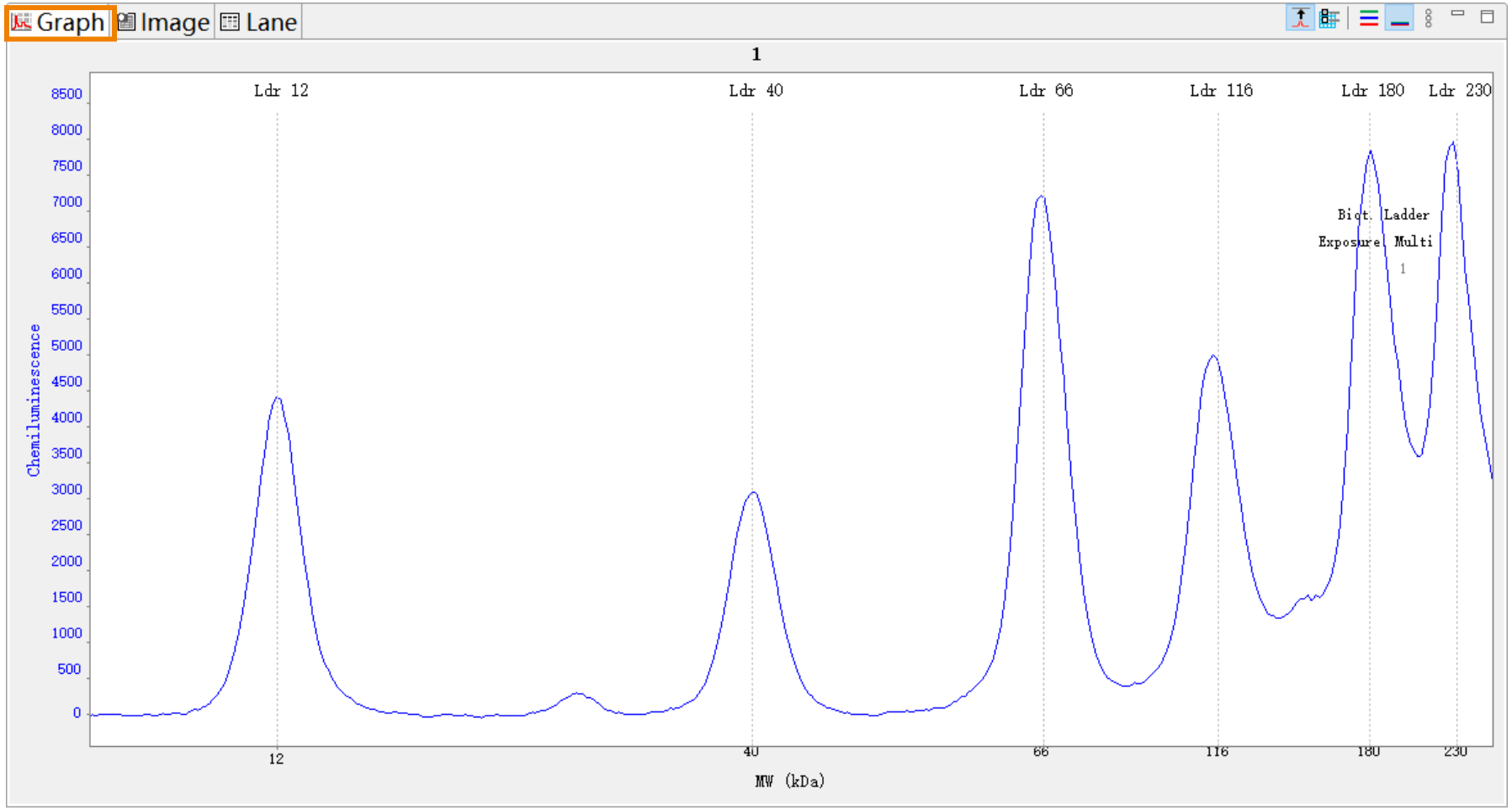
HeLa L...	ERK...	2	1	ERK1	486	48	5901...	7772...	100.0	12.4	26...	242.8

ANALYSIS 界面

峰型图

- 峰形图信息量最大，数据质量分析推荐用峰形图
- 选择不同的通道，将有不止一个Y轴
- 点击 Auto Scale 将自动调整所有毛细管的量程



ANALYSIS 界面

自动校正

峰型图

- 峰形图信息量最大，数据质量分析推荐用峰形图
- 选择不同的通道，将有不止一个Y轴
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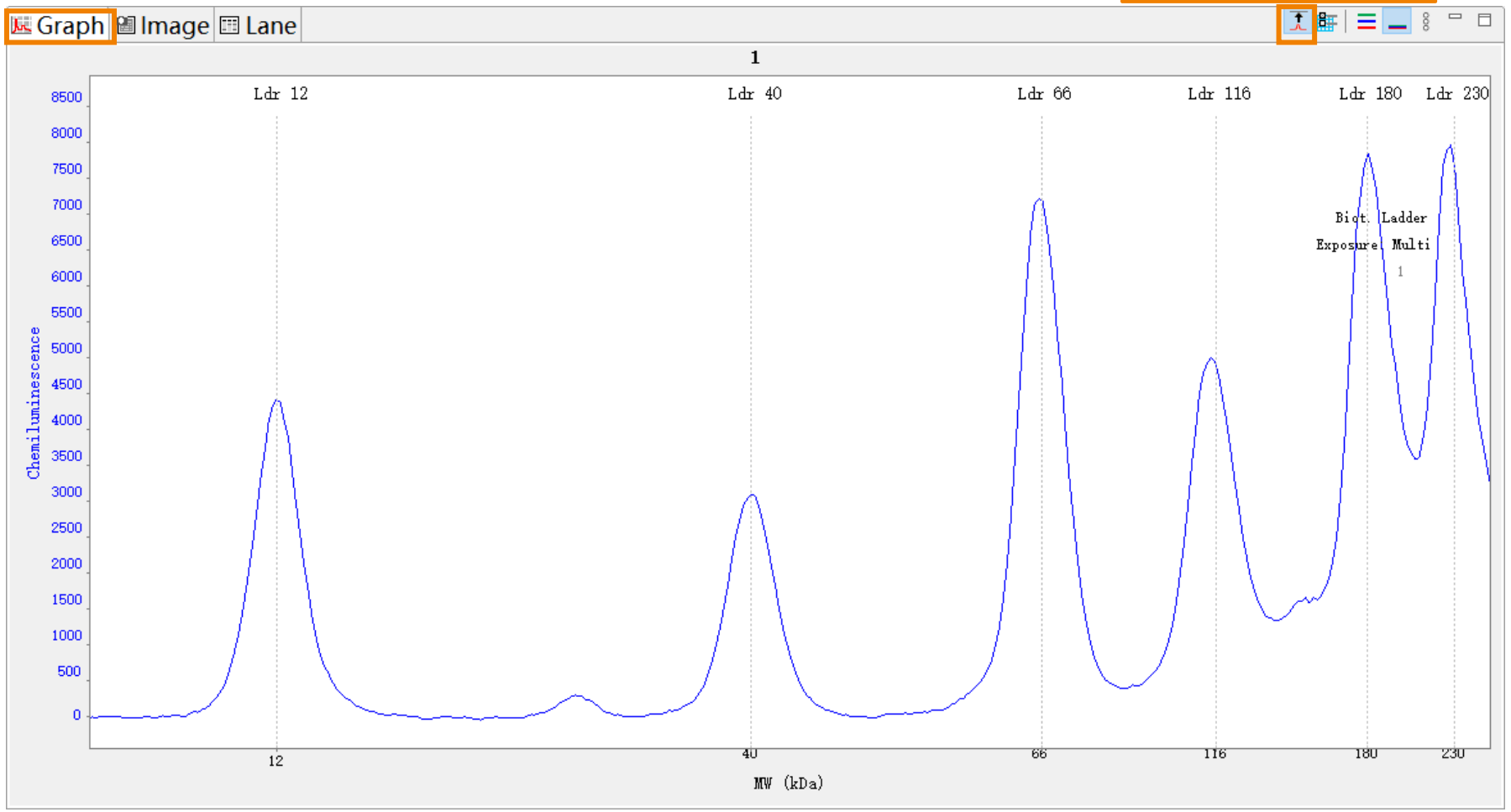

ANALYSIS 界面

峰型图

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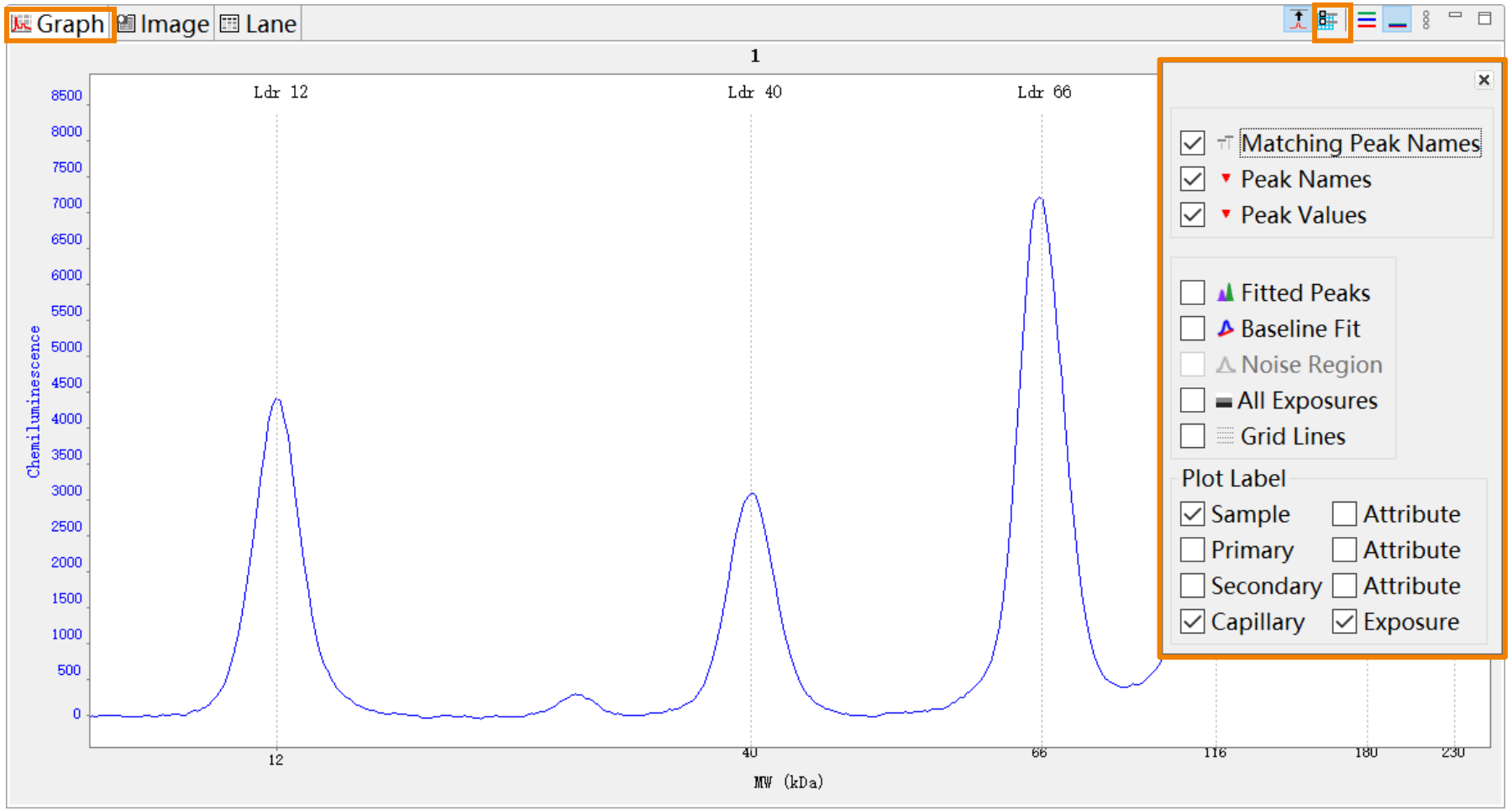

ANALYSIS 界面

结果堆叠展示

峰型图

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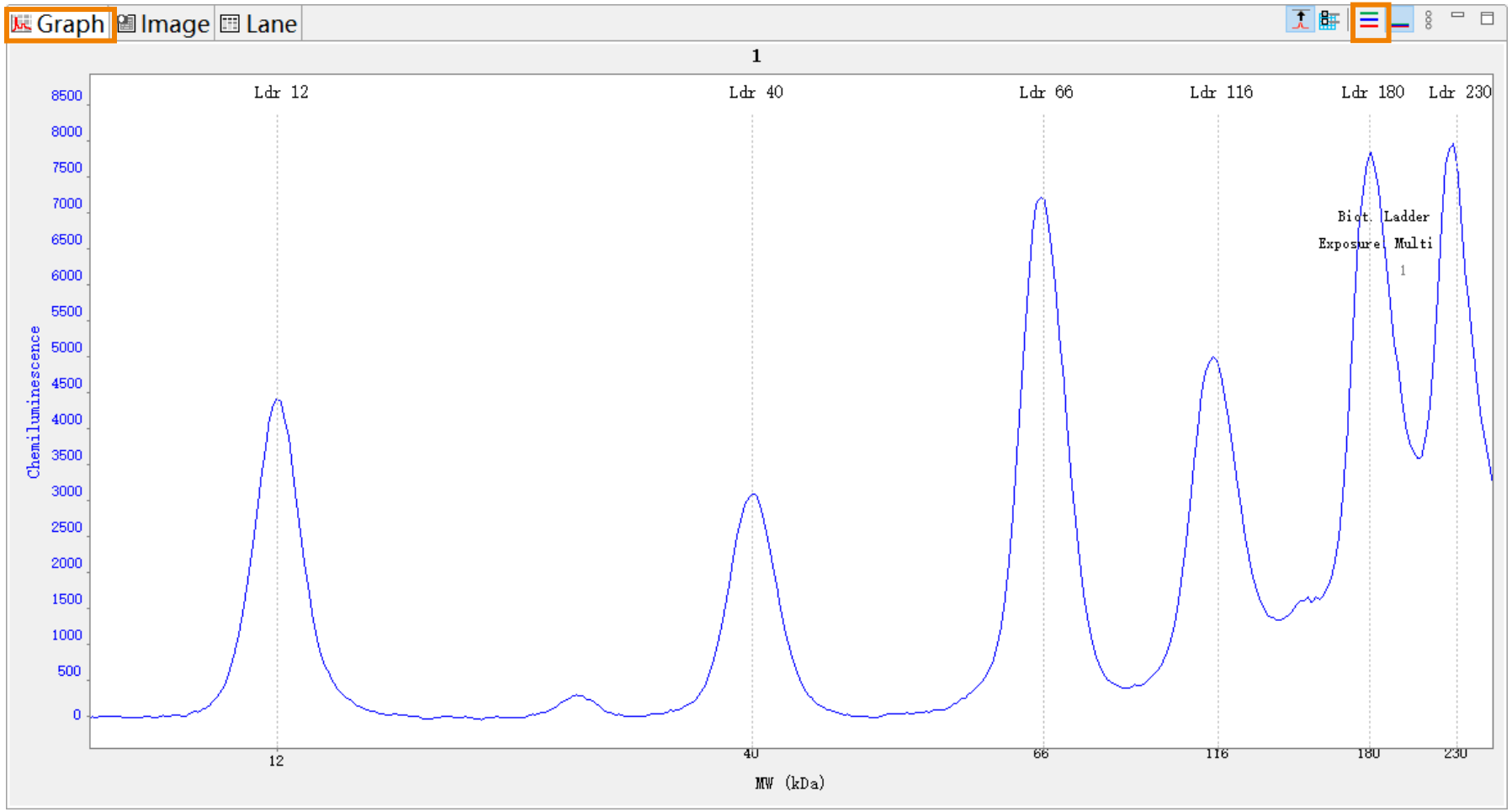
- 点击 Auto Scale 将自动调整所有毛细管的量程

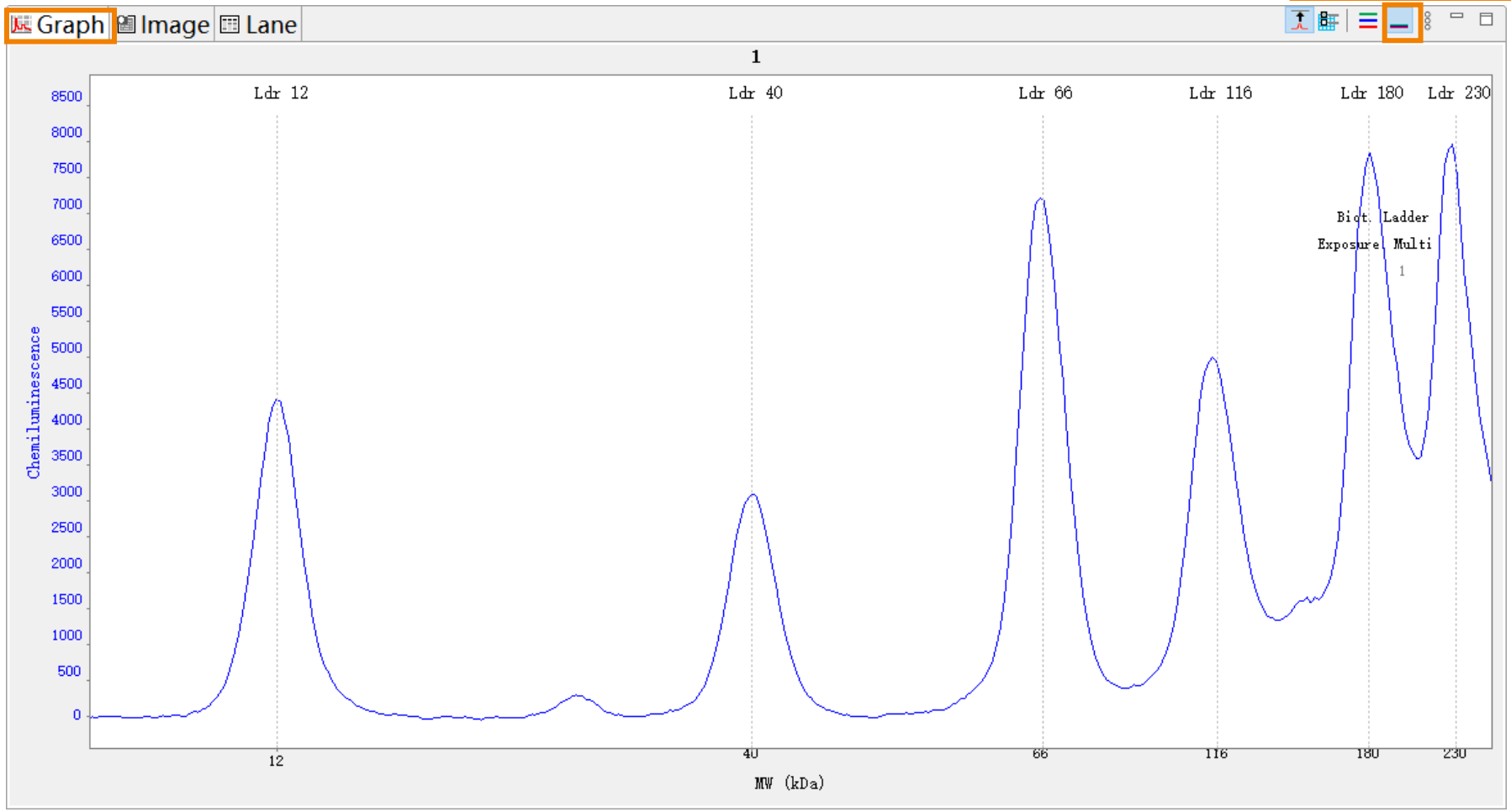


ANALYSIS 界面

结果合并展示

峰型图

- 峰形图信息量最大，数据质量分析推荐用峰形图
- 选择不同的通道，将有不止一个Y轴
- 点击 Auto Scale 将自动调整所有毛细管的量程



ANALYSIS 界面

峰型图

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- 选择不同的通道，将有不止一个Y轴
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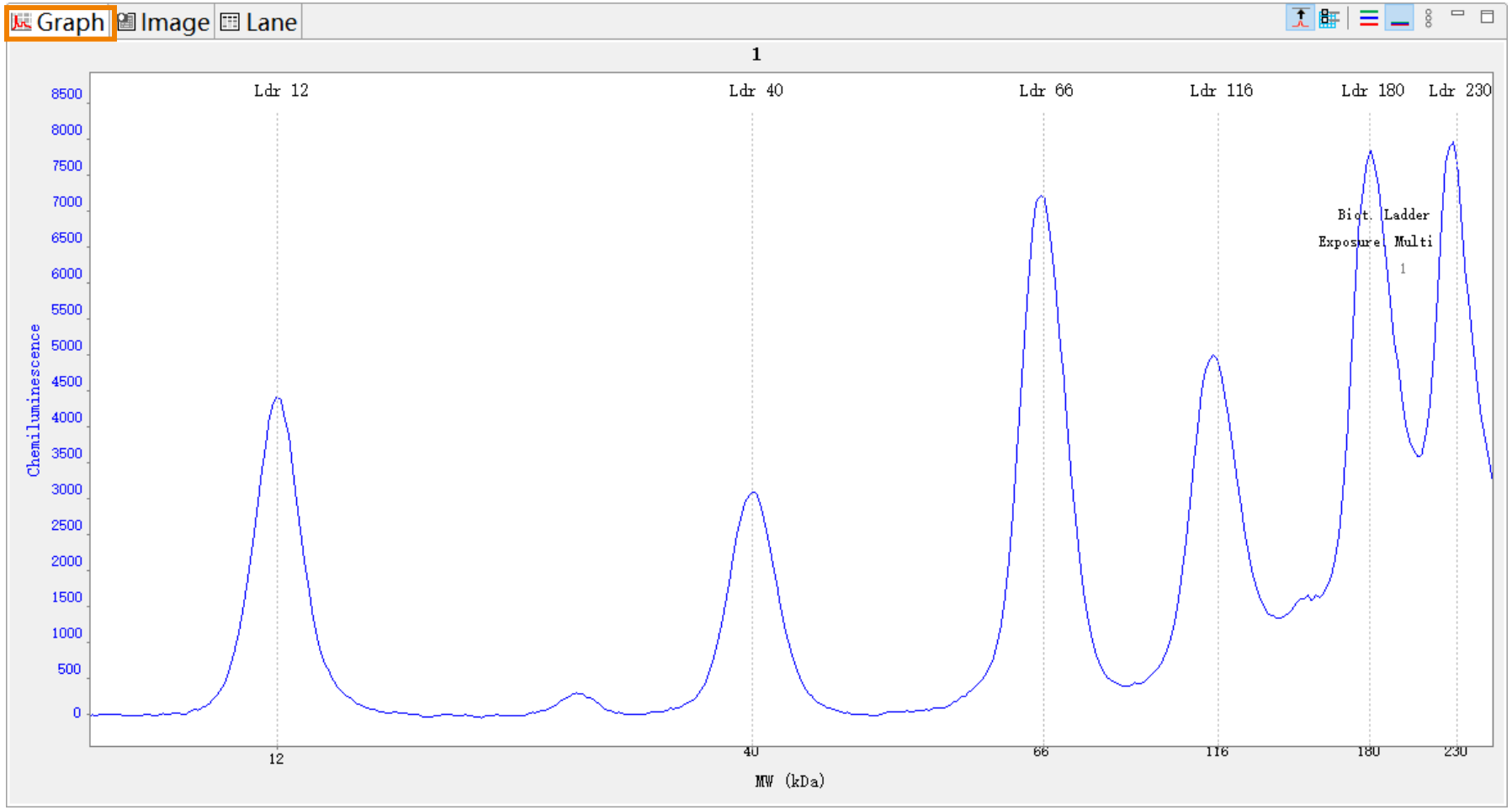
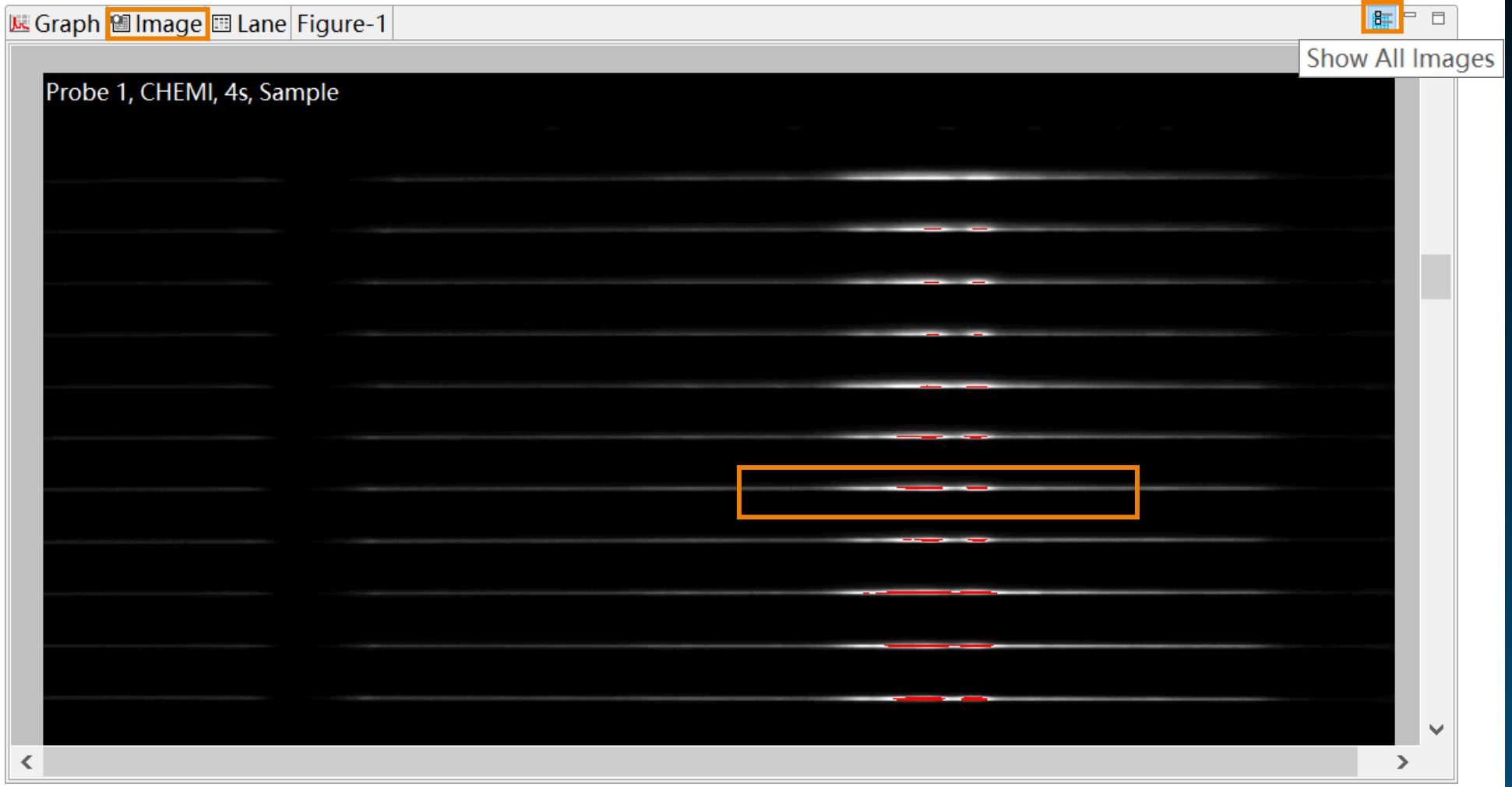


ANALYSIS 界面

成像图

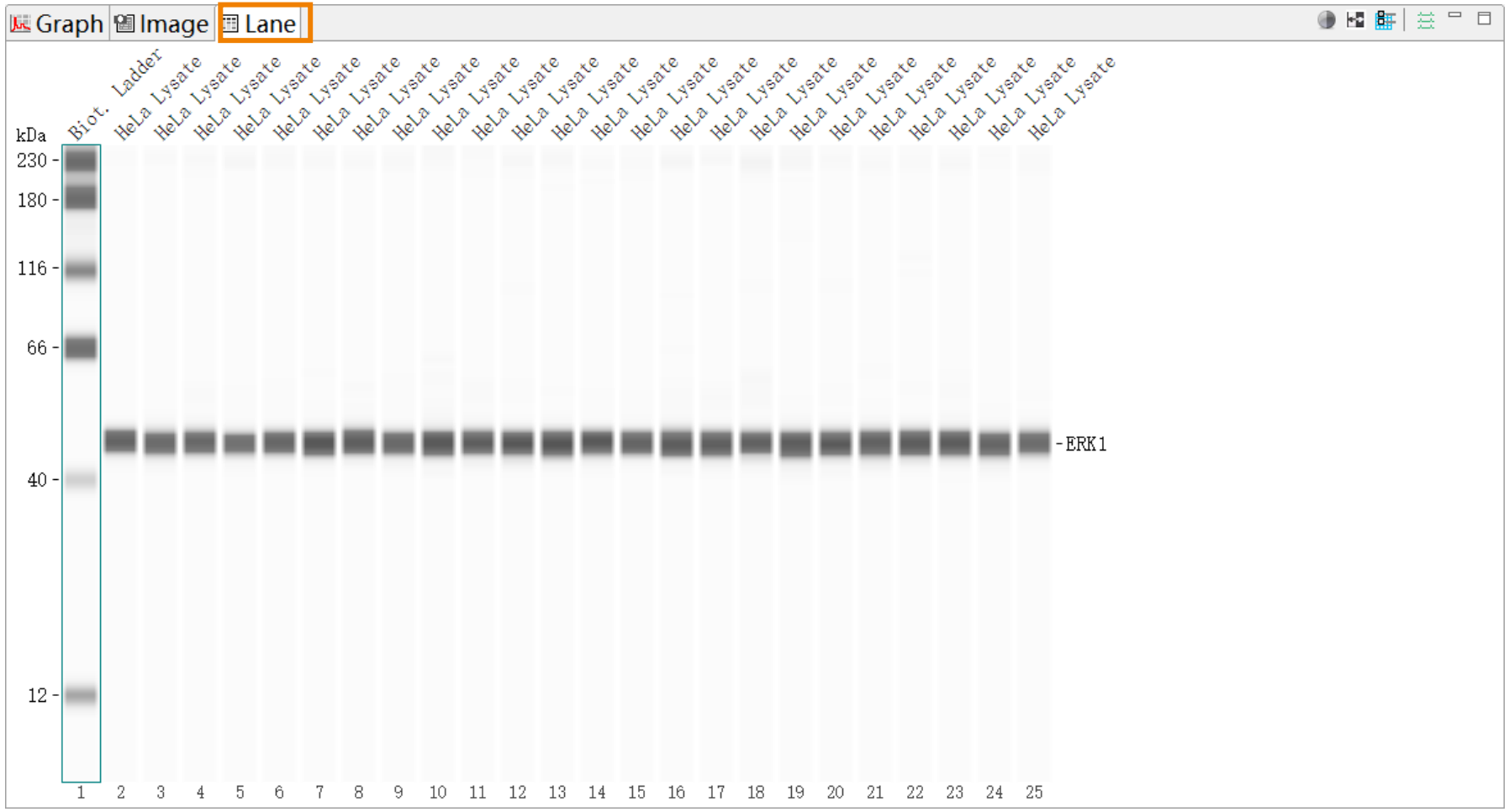
- 毛细管实际曝光结果
- 选择“Show All Images”后若信号过曝，毛细管曝光图中将出现红色像素点（Compass v6.1.0）



ANALYSIS 界面

泳道图

- 大部分报告的结果形式
- 可以任意显示或横向移动泳道
- 可以单独调整每个通道的对比度
  - 对比度调整仅改变图片中条带呈现效果, 峰定量结果不变



ANALYSIS 界面

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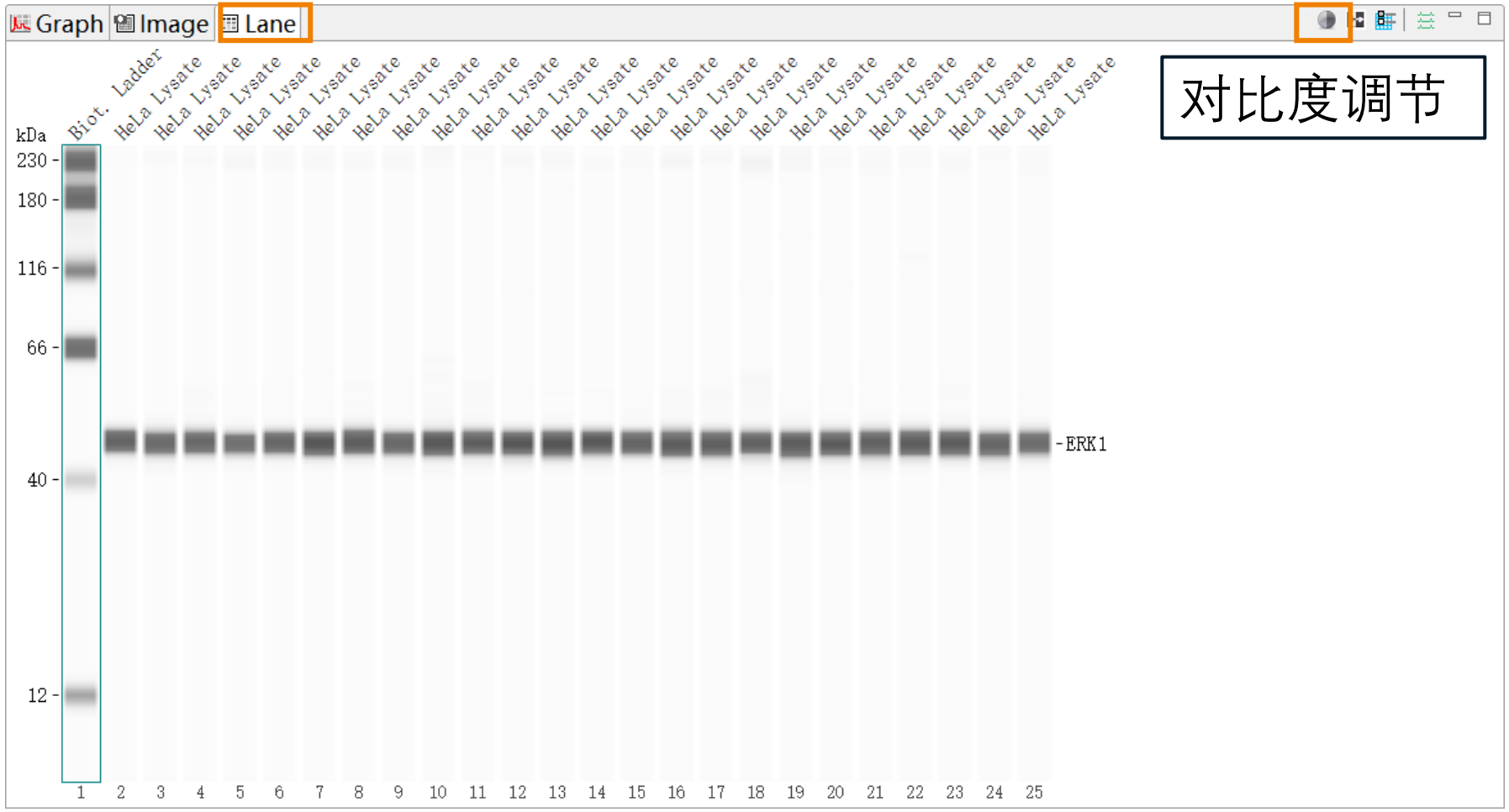

ANALYSIS 界面

泳道图

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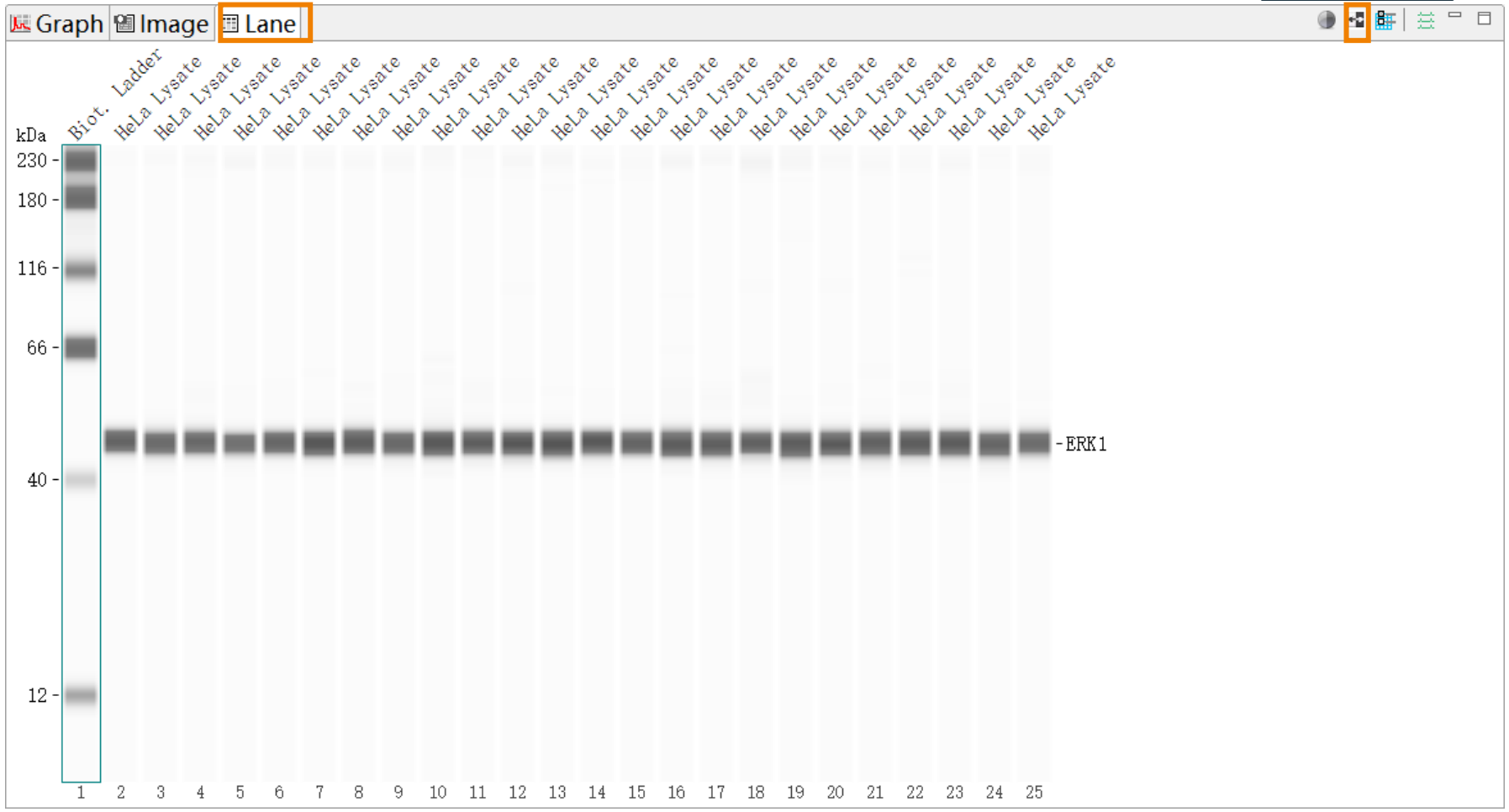
反相



ANALYSIS 界面

泳道图

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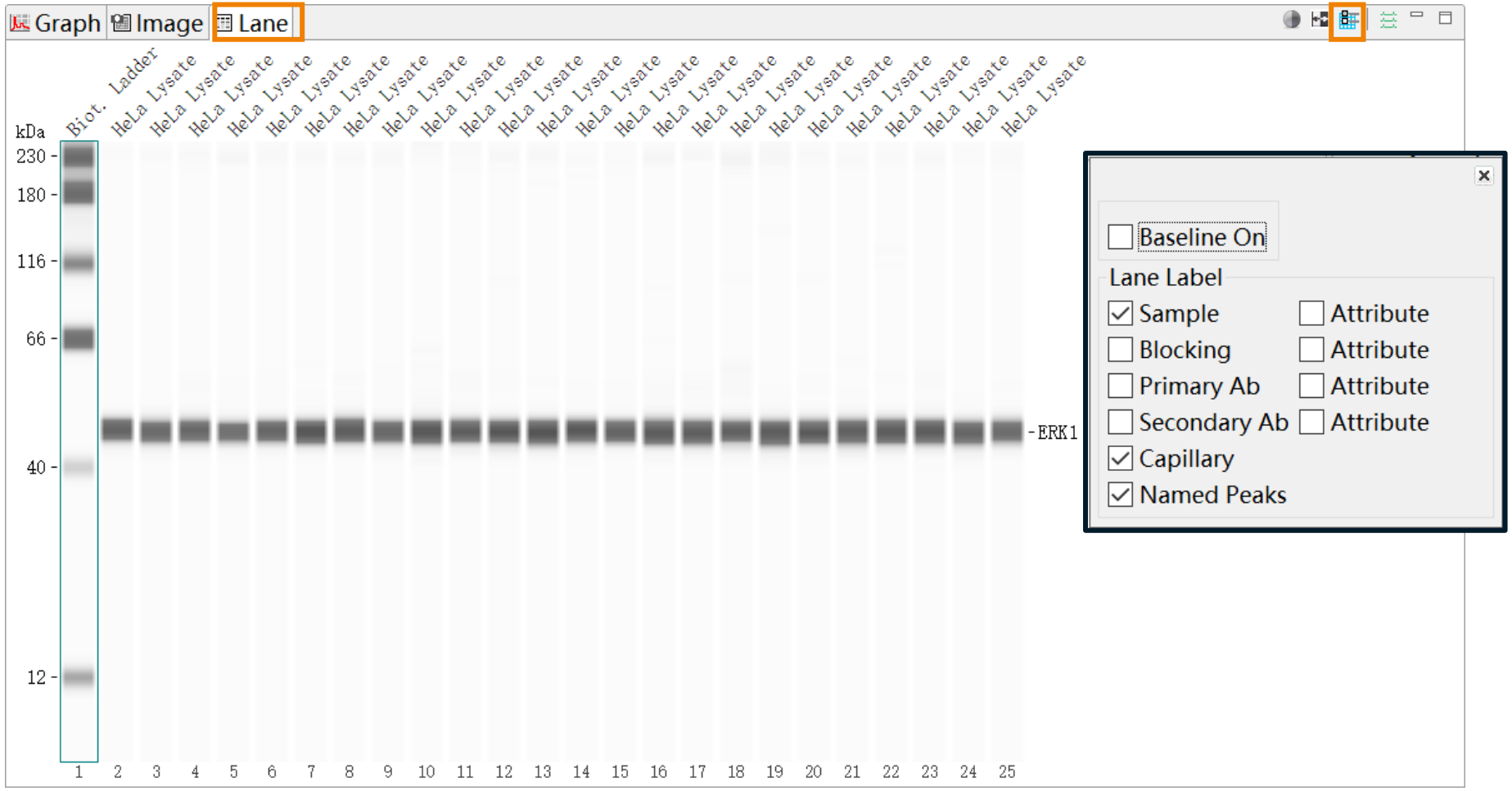

ANALYSIS 界面

泳道图

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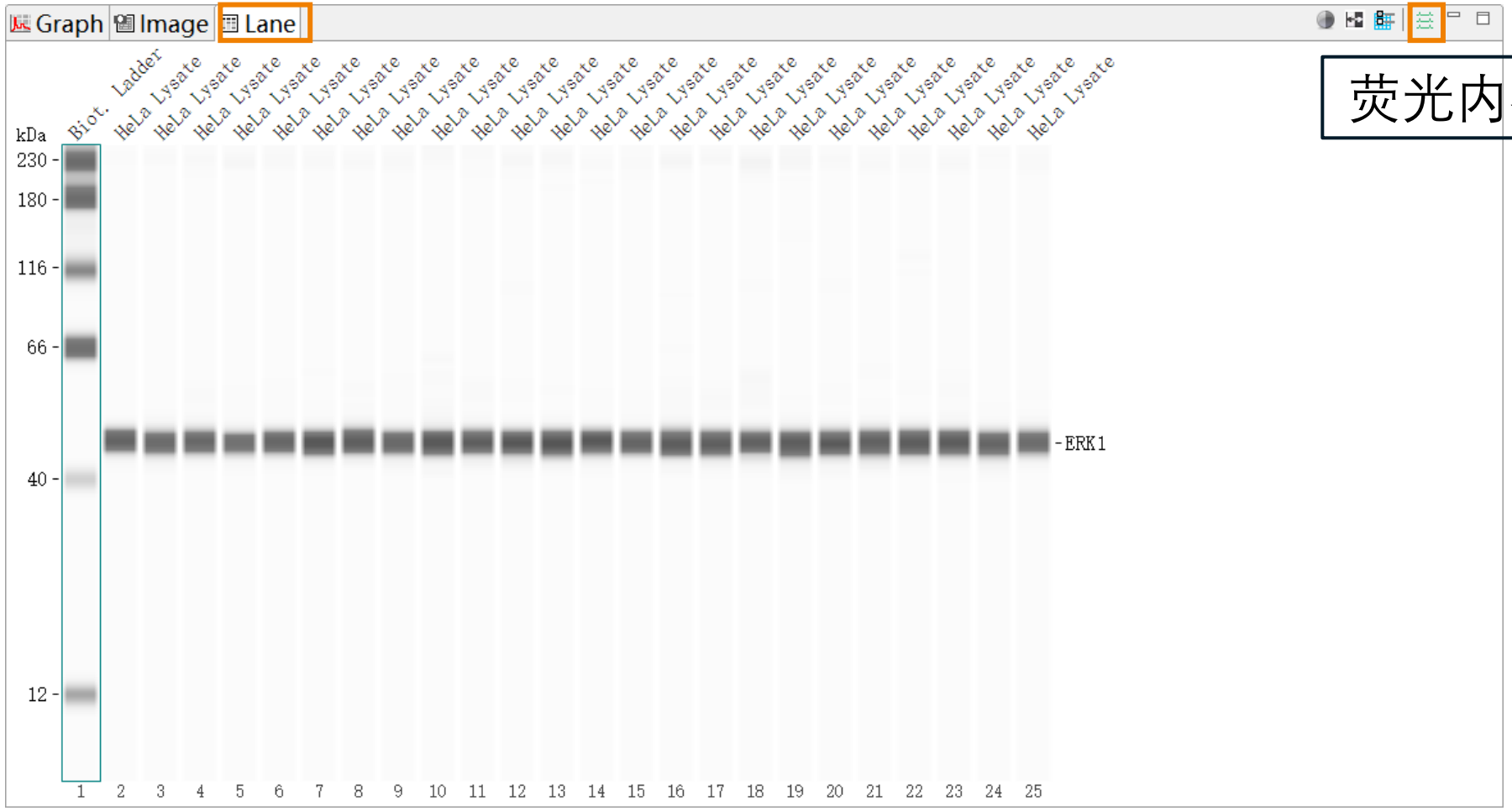
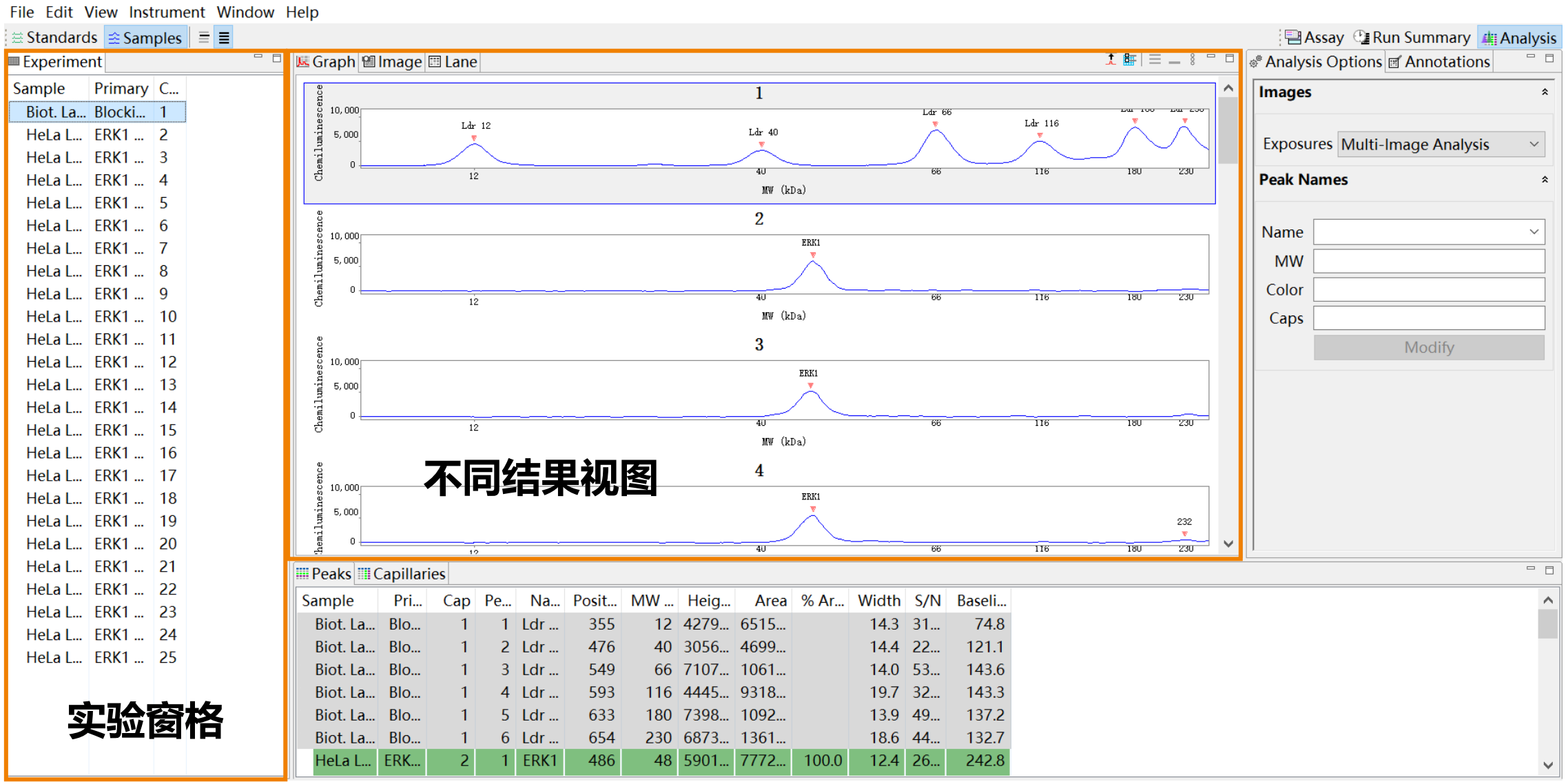


荧光内参

ANALYSIS 界面



Sample	Primary	C...
Biot. La...	Blocki...	1
HeLa L...	ERK1 ...	2
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HeLa L...	ERK1 ...	4
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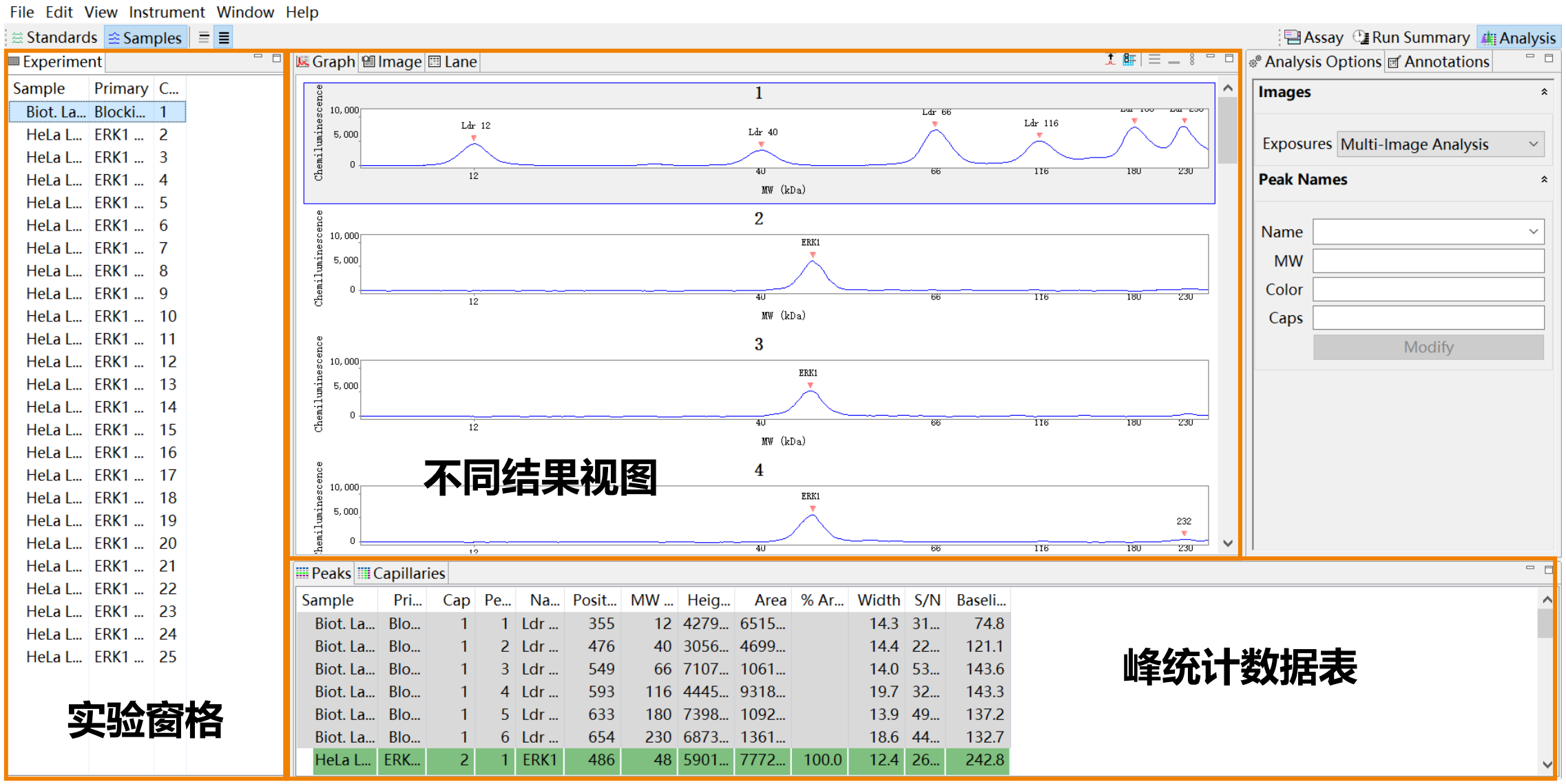
HeLa L...	ERK1 ...	12
HeLa L...	ERK1 ...	13
HeLa L...	ERK1 ...	14
HeLa L...	ERK1 ...	15
HeLa L...	ERK1 ...	16
HeLa L...	ERK1 ...	17
HeLa L...	ERK1 ...	18
HeLa L...	ERK1 ...	19
HeLa L...	ERK1 ...	20
HeLa L...	ERK1 ...	21
HeLa L...	ERK1 ...	22
HeLa L...	ERK1 ...	23
HeLa L...	ERK1 ...	24
HeLa L...	ERK1 ...	25

Sample	Pri...	Cap	Pe...	Na...	Posit...	MW ...	Heig...	Area	% Ar...	Width	S/N	Baseli...
Biot. La...	Blo...	1	1	Ldr ...	355	12	4279...	6515...		14.3	31...	74.8
Biot. La...	Blo...	1	2	Ldr ...	476	40	3056...	4699...		14.4	22...	121.1
Biot. La...	Blo...	1	3	Ldr ...	549	66	7107...	1061...		14.0	53...	143.6
Biot. La...	Blo...	1	4	Ldr ...	593	116	4445...	9318...		19.7	32...	143.3
Biot. La...	Blo...	1	5	Ldr ...	633	180	7398...	1092...		13.9	49...	137.2
Biot. La...	Blo...	1	6	Ldr ...	654	230	6873...	1361...		18.6	44...	132.7
HeLa L...	ERK...	2	1	ERK1	486	48	5901...	7772...	100.0	12.4	26...	242.8

ANALYSIS 界面



Sample	Primary	C...
Biot. La...	Blocki...	1
HeLa L...	ERK1 ...	2
HeLa L...	ERK1 ...	3
HeLa L...	ERK1 ...	4
HeLa L...	ERK1 ...	5
HeLa L...	ERK1 ...	6
HeLa L...	ERK1 ...	7
HeLa L...	ERK1 ...	8
HeLa L...	ERK1 ...	9
HeLa L...	ERK1 ...	10
HeLa L...	ERK1 ...	11
HeLa L...	ERK1 ...	12
HeLa L...	ERK1 ...	13
HeLa L...	ERK1 ...	14
HeLa L...	ERK1 ...	15
HeLa L...	ERK1 ...	16
HeLa L...	ERK1 ...	17
HeLa L...	ERK1 ...	18
HeLa L...	ERK1 ...	19
HeLa L...	ERK1 ...	20
HeLa L...	ERK1 ...	21
HeLa L...	ERK1 ...	22
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HeLa L...	ERK1 ...	24
HeLa L...	ERK1 ...	25

Sample	Pri...	Cap	Pe...	Na...	Posit...	MW ...	Heig...	Area	% Ar...	Width	S/N	Baseli...
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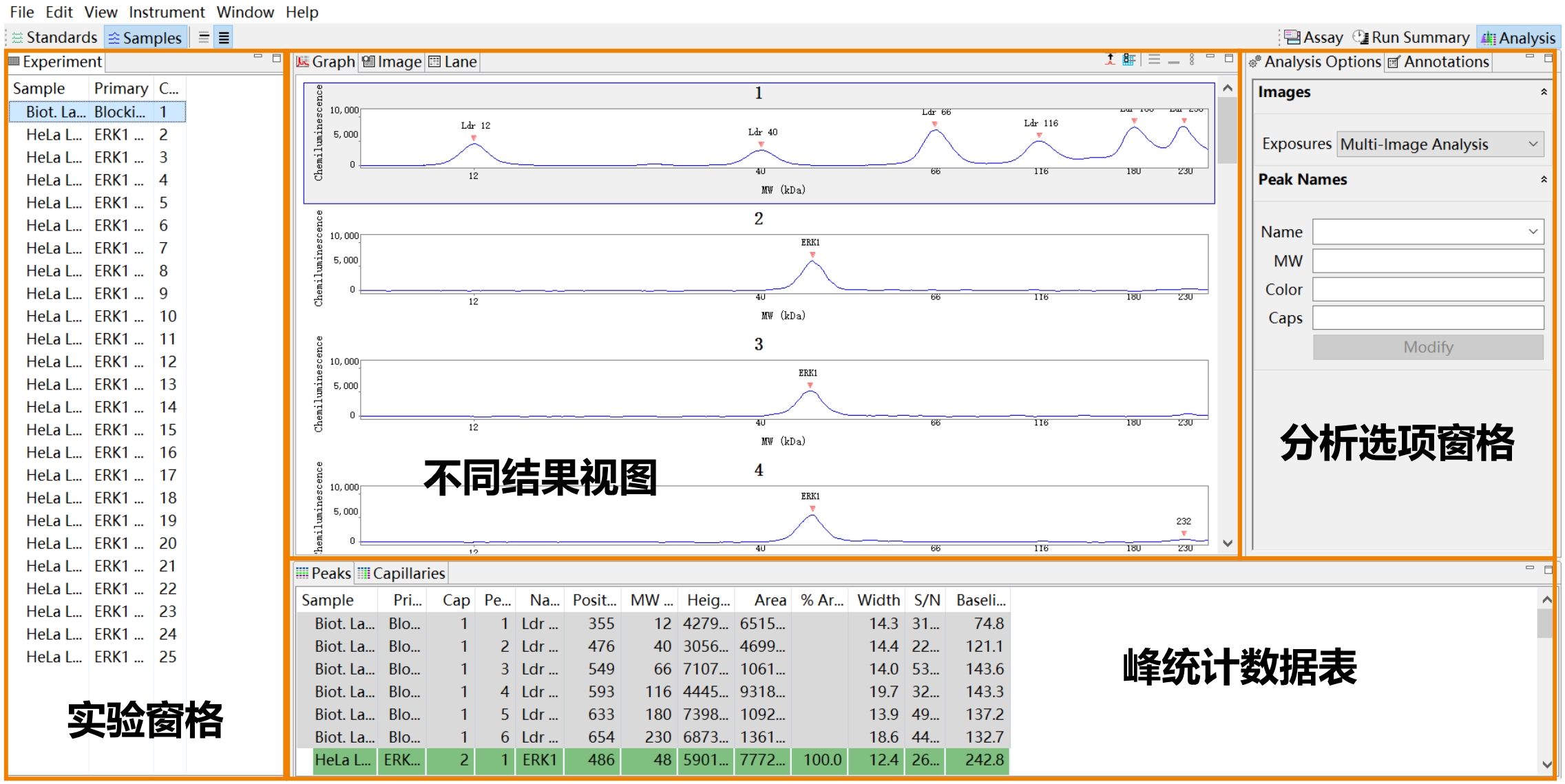
ANALYSIS 界面



01

Compass 介绍

02

数据分析前检查

03

数据分析

数据分析前检查

- 请确保在查看数据前，先通过几个部分的检查确认实验没有问题，包括荧光内参确认、Ladder确认、数据质量确认
  - 荧光内参整齐并识别良好
  - Ladder 识别良好
  - 化学发光信号无过曝
  - 荧光通道相机无饱和（Jess）
  - 背景无过高
  - 峰面积正常

1. 荧光内参整齐

File Edit Instrument Window Help

Assay | Run Summary | Analysis

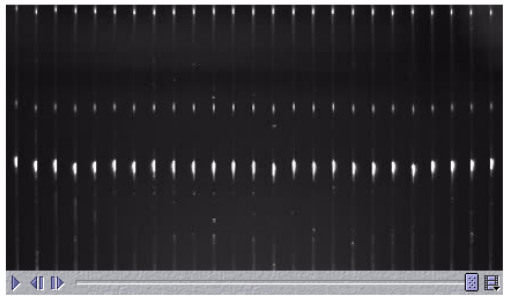
Run: ERK 1 Wes run results rev 001

Status | History

run	Wes Installation run
path	C:\
assay	Wes-25 Size
kit info	Regular: 12-230 kDa
instrument	Wes : Wes WS2002 - WS2002
plate S/N	7751502228
started	星期日 4:10 下午 一月 10, 2016 CST
completed	星期日 6:48 下午 一月 10, 2016 CST

Sample	Sep	B	1°	2°	Detect	Results
4:10 下	4:14 下	5:04 下	5:10 下	5:48 下	6:28 下	6:45 下

Separation | IV Plot



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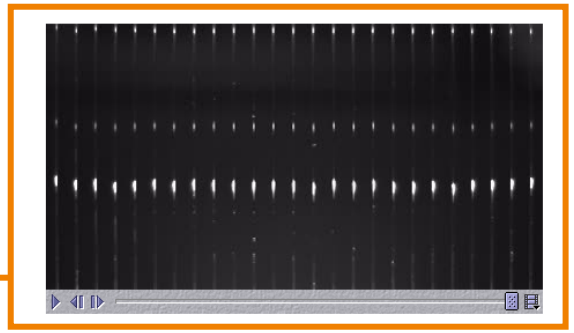
Separation | IV Plot



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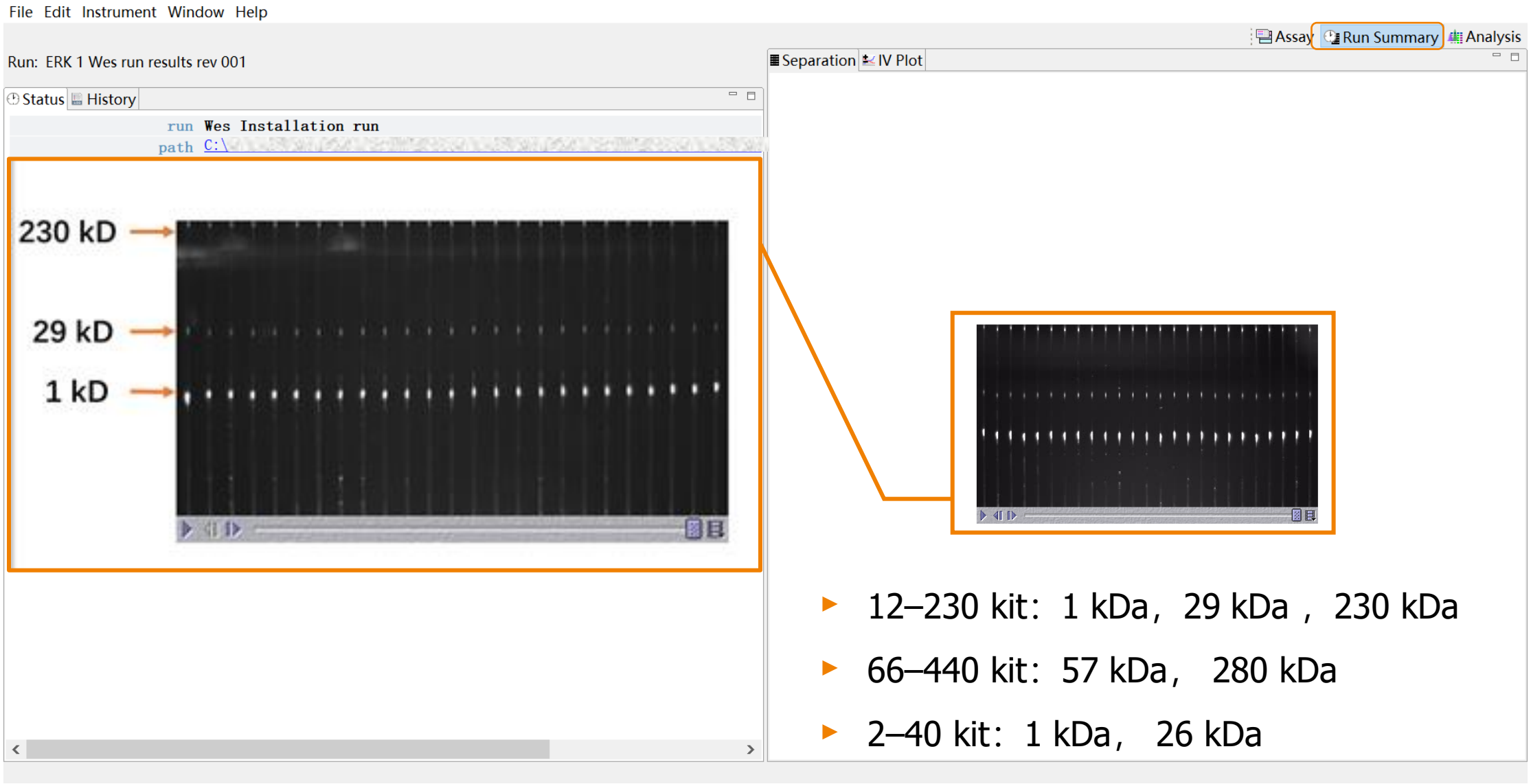

- 12–230 kit：1 kDa，29 kDa ，230 kDa
- 66–440 kit：57 kDa，280 kDa
- 2–40 kit：1 kDa，26 kDa

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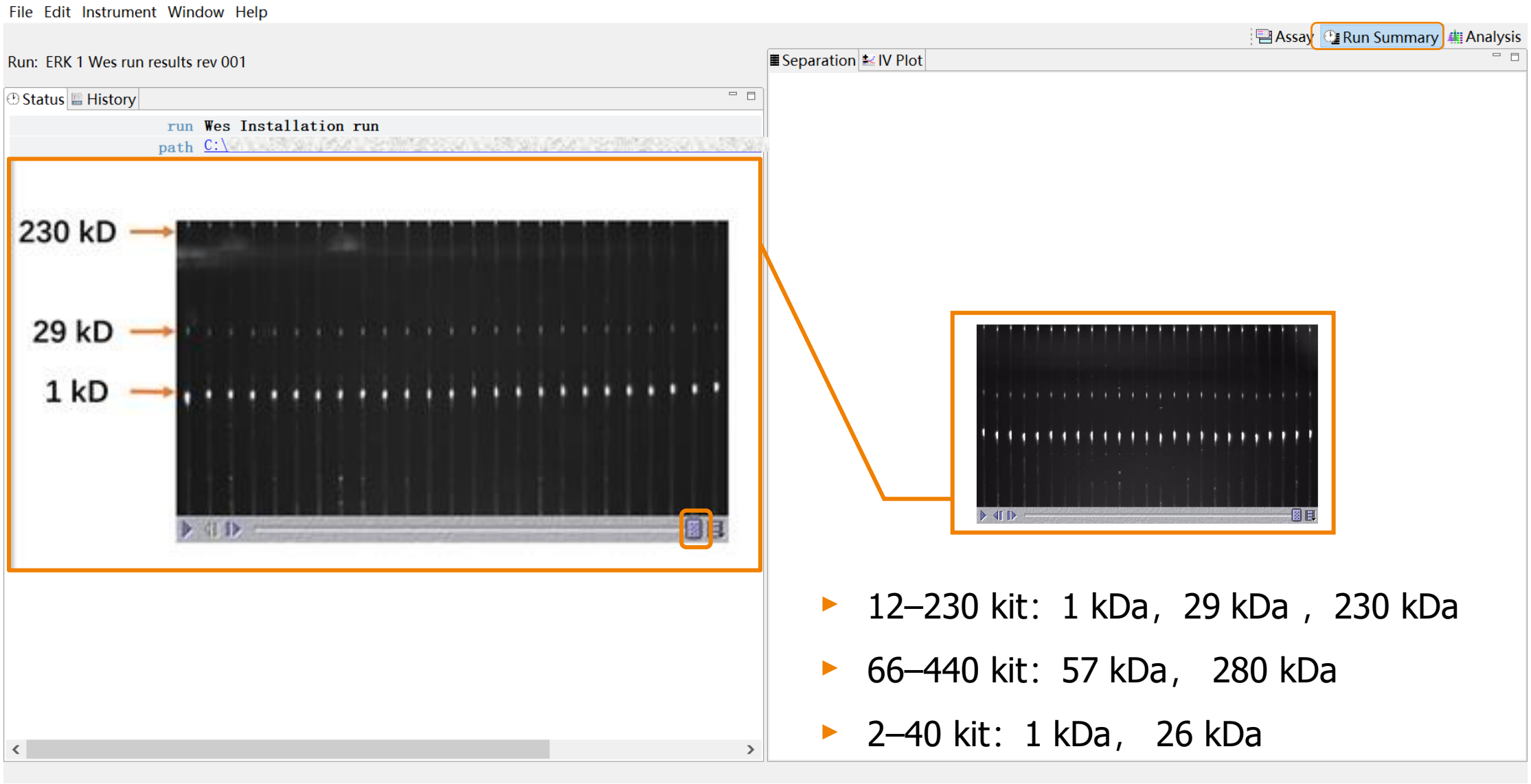

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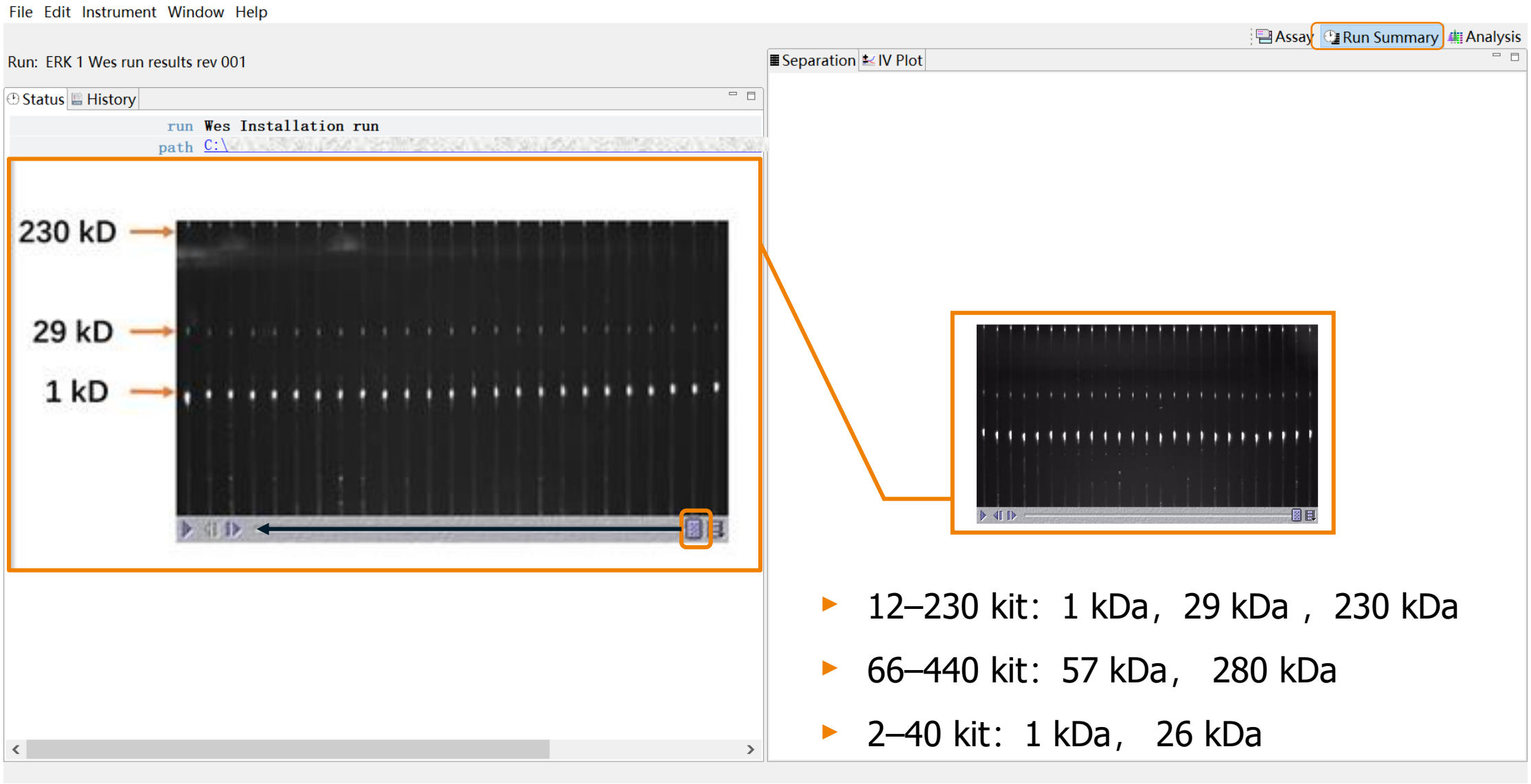

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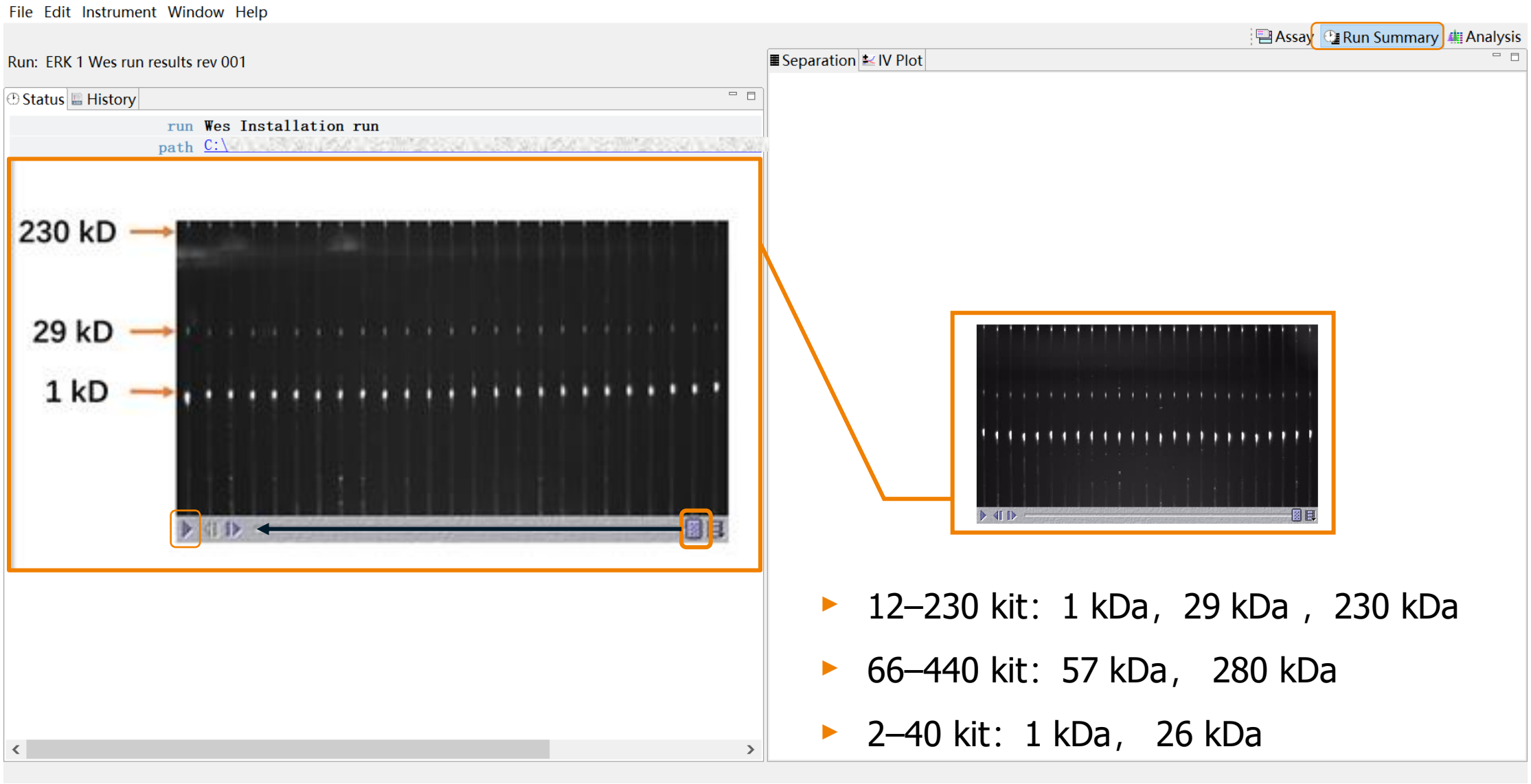

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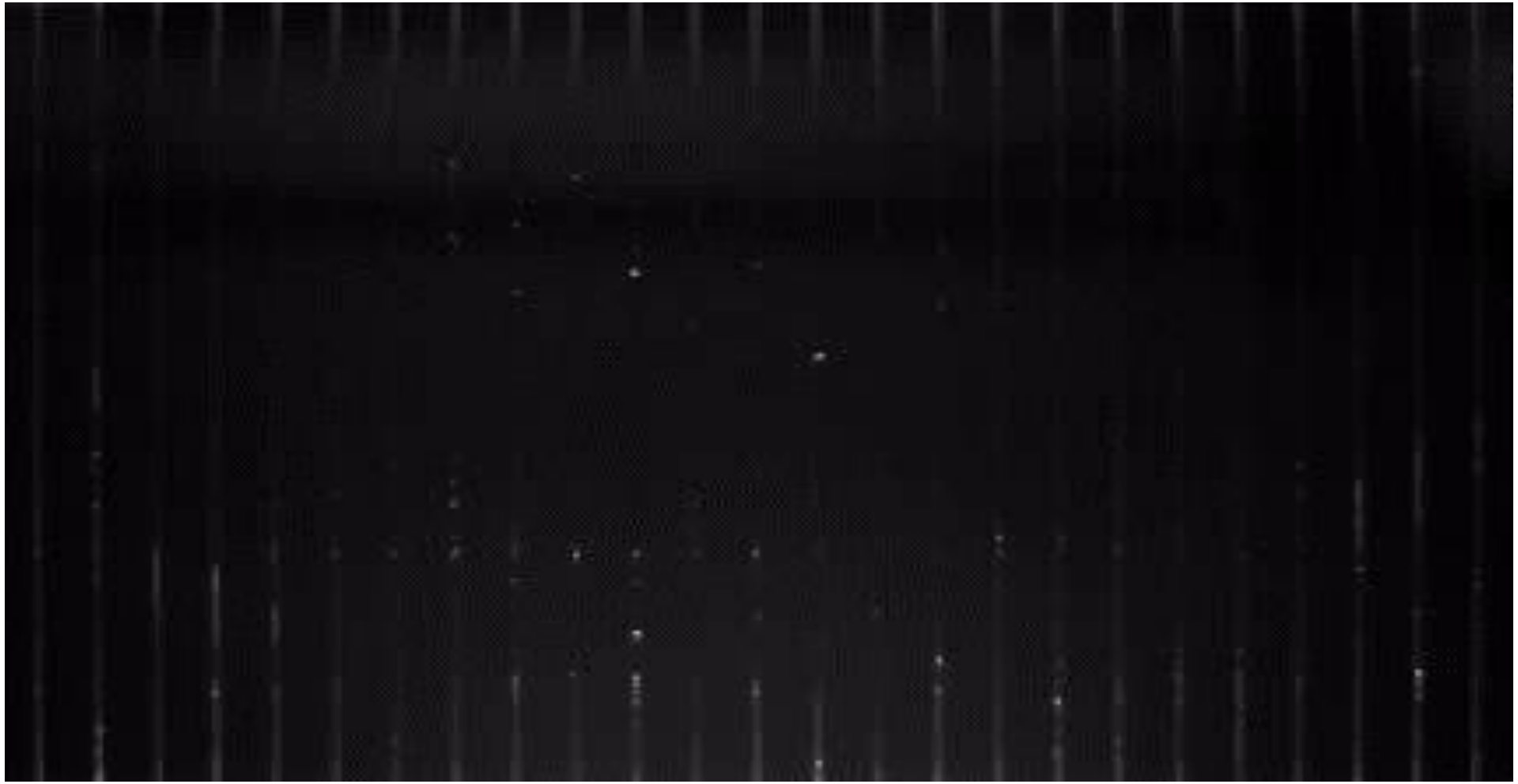

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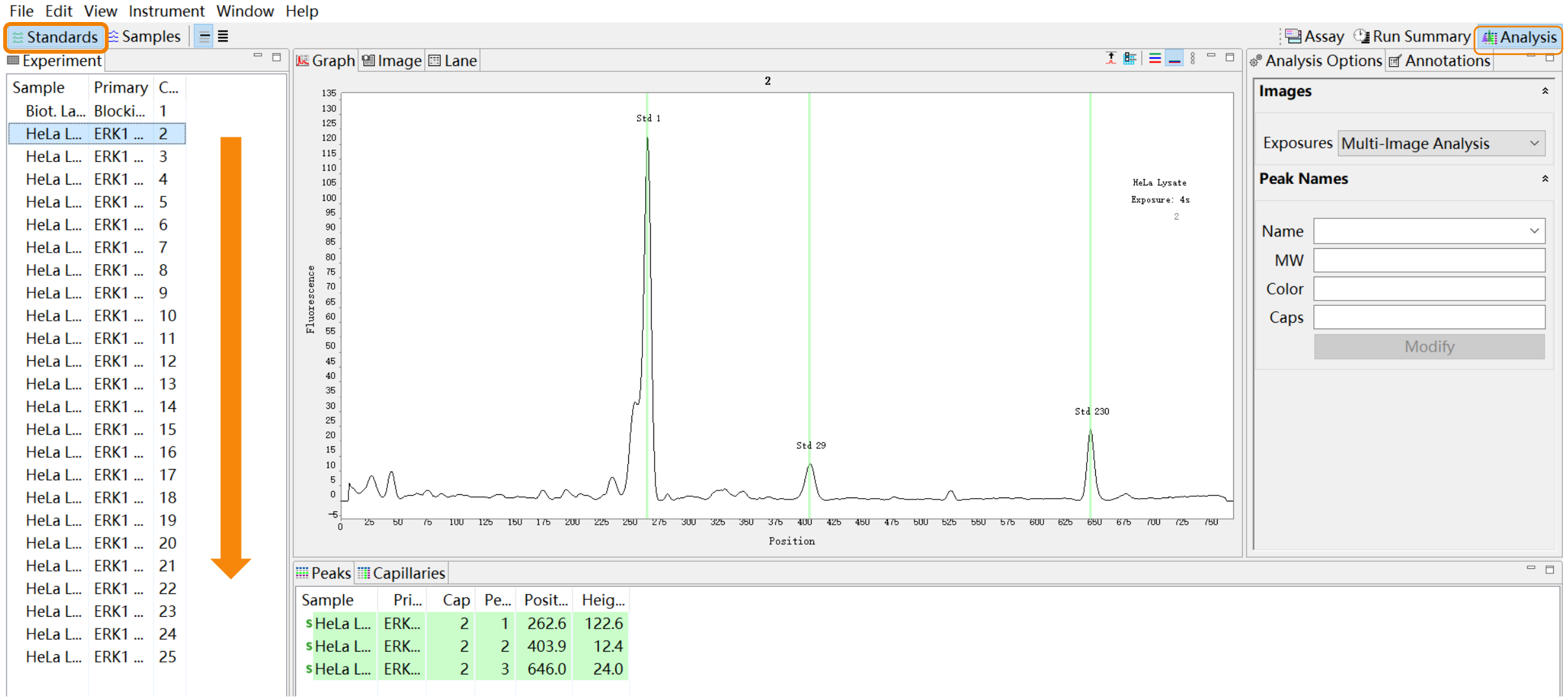
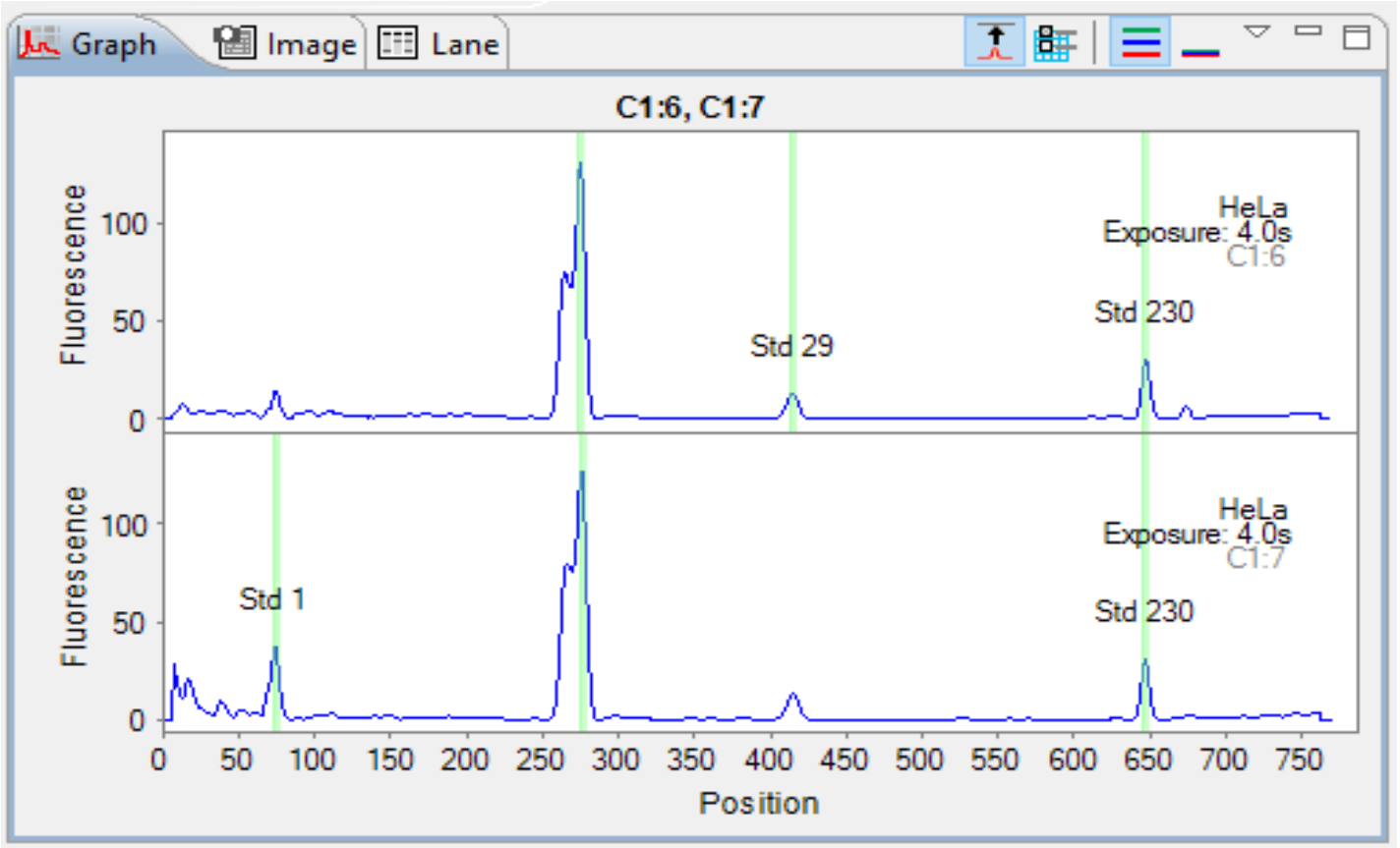


1. 荧光内参整齐

Compass 软件一般能自动识别校正荧光内参，但是偶尔也会识别不正确

荧光内参识别不正确，将导致**分子量计算错误**



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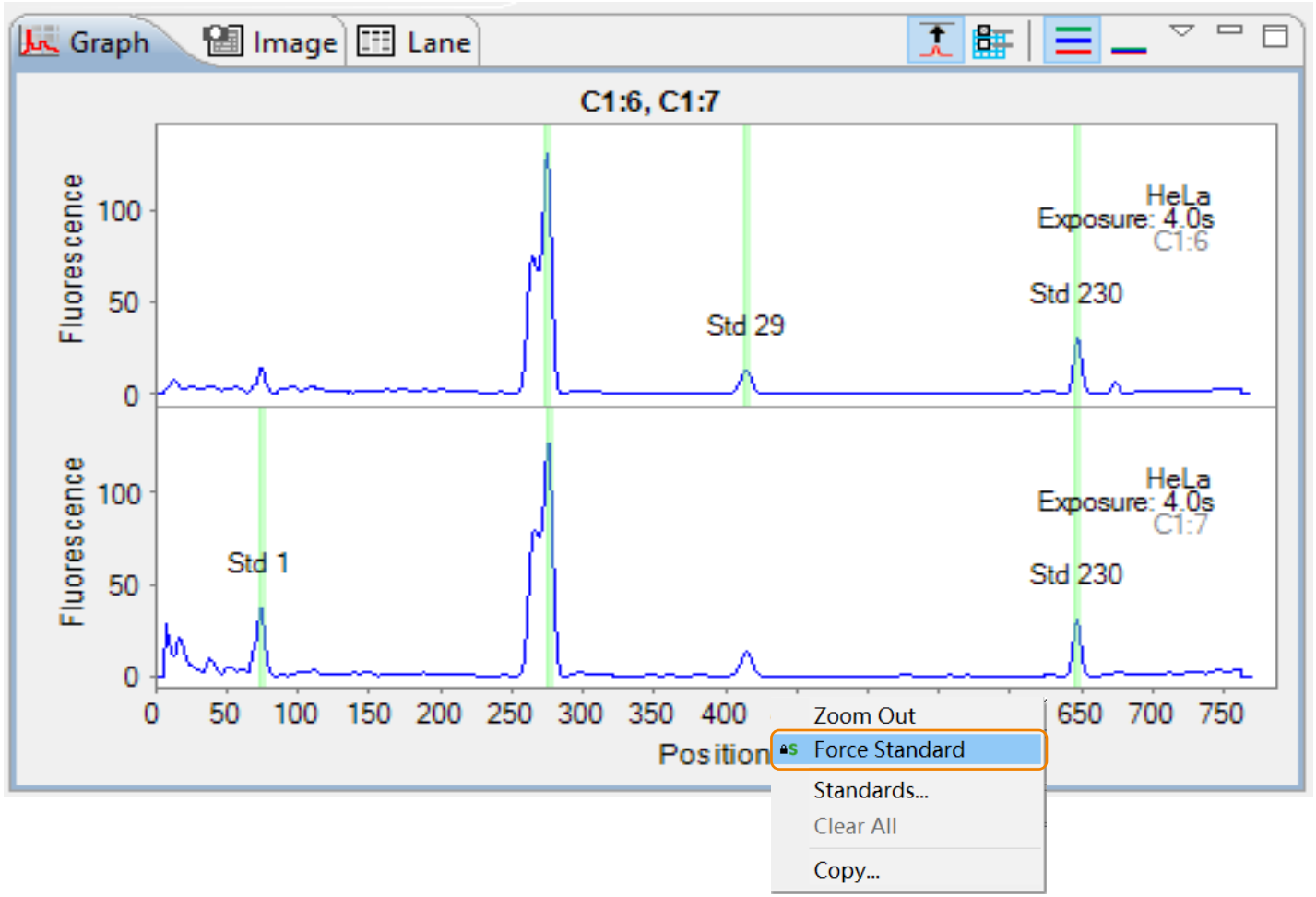
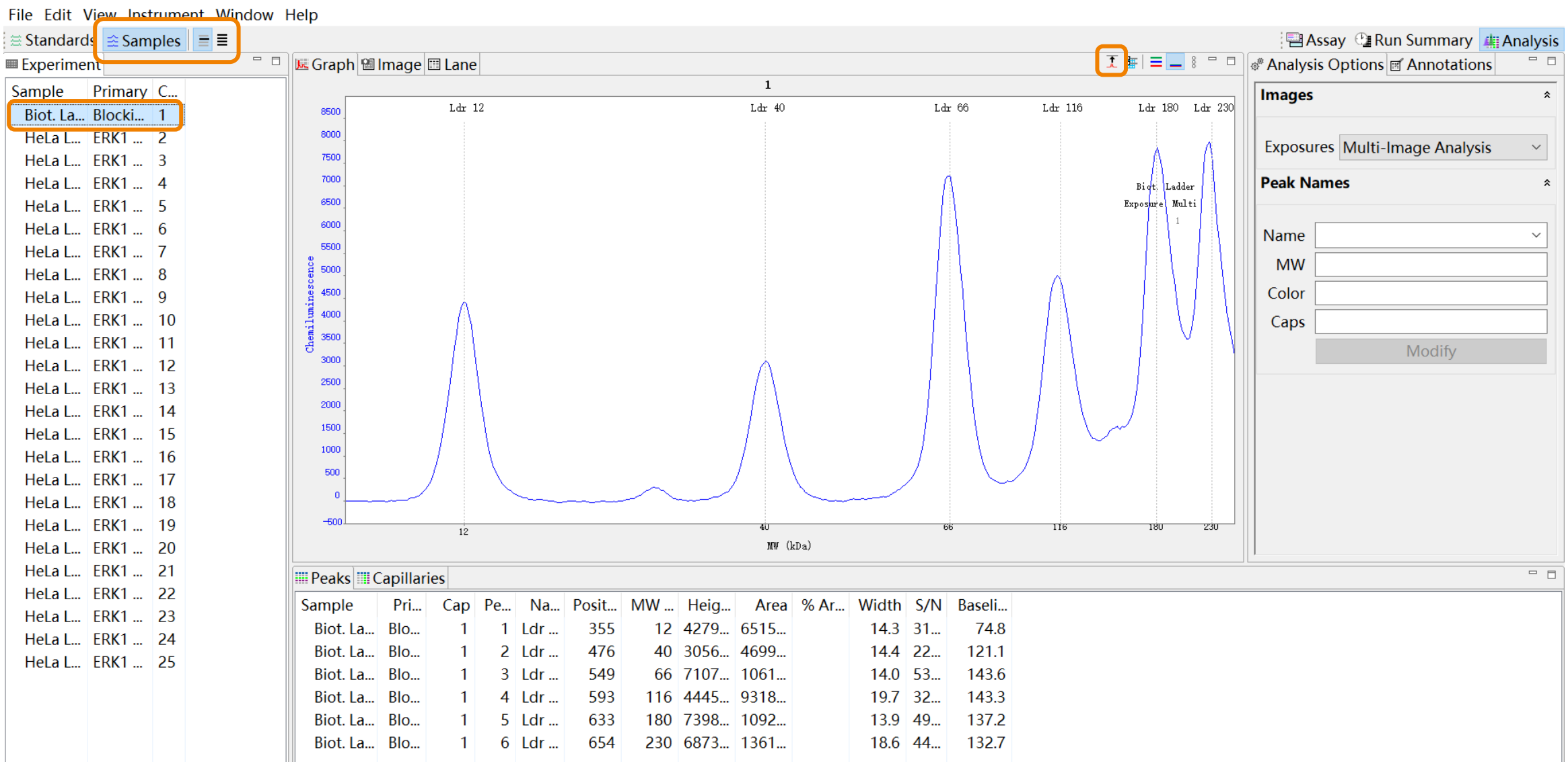


2. LADDER 识别良好



Sample	Primary	C...
Biot. La...	Blocki...	1
HeLa L...	ERK1 ...	2
HeLa L...	ERK1 ...	3
HeLa L...	ERK1 ...	4
HeLa L...	ERK1 ...	5
HeLa L...	ERK1 ...	6
HeLa L...	ERK1 ...	7
HeLa L...	ERK1 ...	8
HeLa L...	ERK1 ...	9
HeLa L...	ERK1 ...	10
HeLa L...	ERK1 ...	11
HeLa L...	ERK1 ...	12
HeLa L...	ERK1 ...	13
HeLa L...	ERK1 ...	14
HeLa L...	ERK1 ...	15
HeLa L...	ERK1 ...	16
HeLa L...	ERK1 ...	17
HeLa L...	ERK1 ...	18
HeLa L...	ERK1 ...	19
HeLa L...	ERK1 ...	20
HeLa L...	ERK1 ...	21
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HeLa L...	ERK1 ...	25

Sample	Pri...	Cap	Pe...	Na...	Posit...	MW ...	Heig...	Area	% Ar...	Width	S/N	Baseli...
Biot. La...	Blo...	1	1	Ldr ...	355	12	4279...	6515...		14.3	31...	74.8
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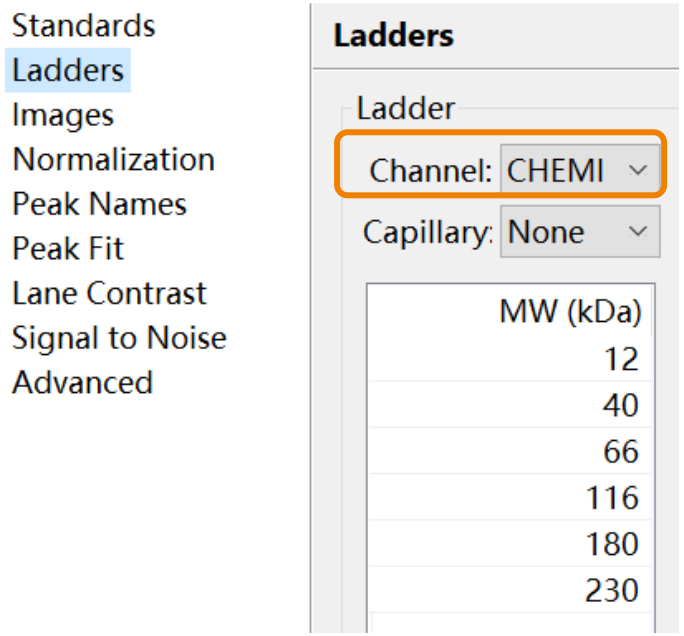
Biot. La...	Blo...	1	6	Ldr ...	654	230	6873...	1361...		18.6	44...	132.7

2. LADDER 识别良好

1. 如果 ladder 峰识别错误, 点击右键进行校正
   - 注意您的 ladder 通道要选择正确

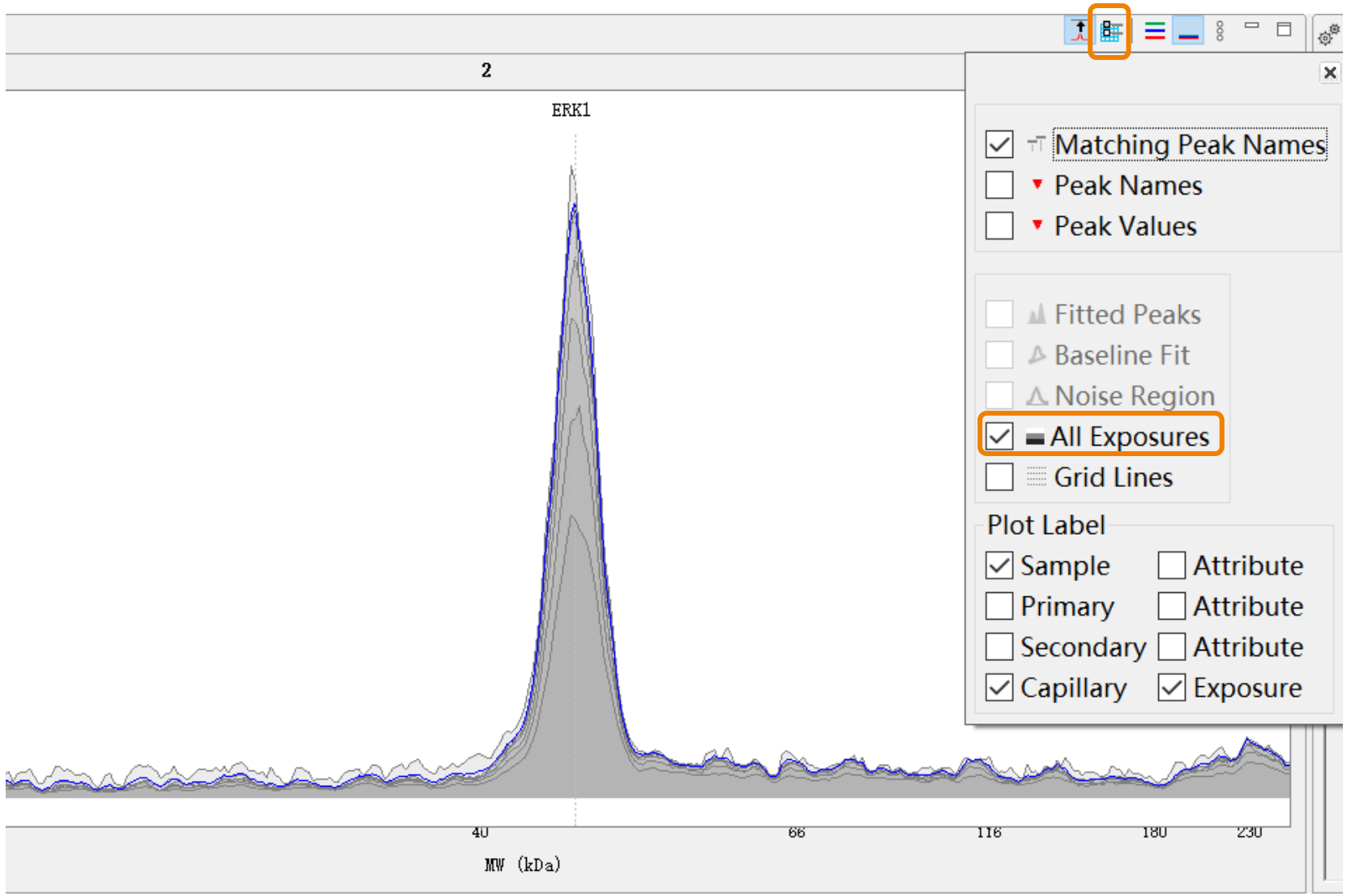
2. 如果有一个 ladder 峰不可见, 可能调整下视野
   - 点击 View→ View Region ， 选择 *Full Range*, 可查看整个毛细管的视野数据

3. 如果不能通过识别来校正某个 *ladder* 峰
   点击 Edit → analysis →ladders.
   - 如有必要，移除某个Ladder；或选择 “none” 关闭 ladder 选项



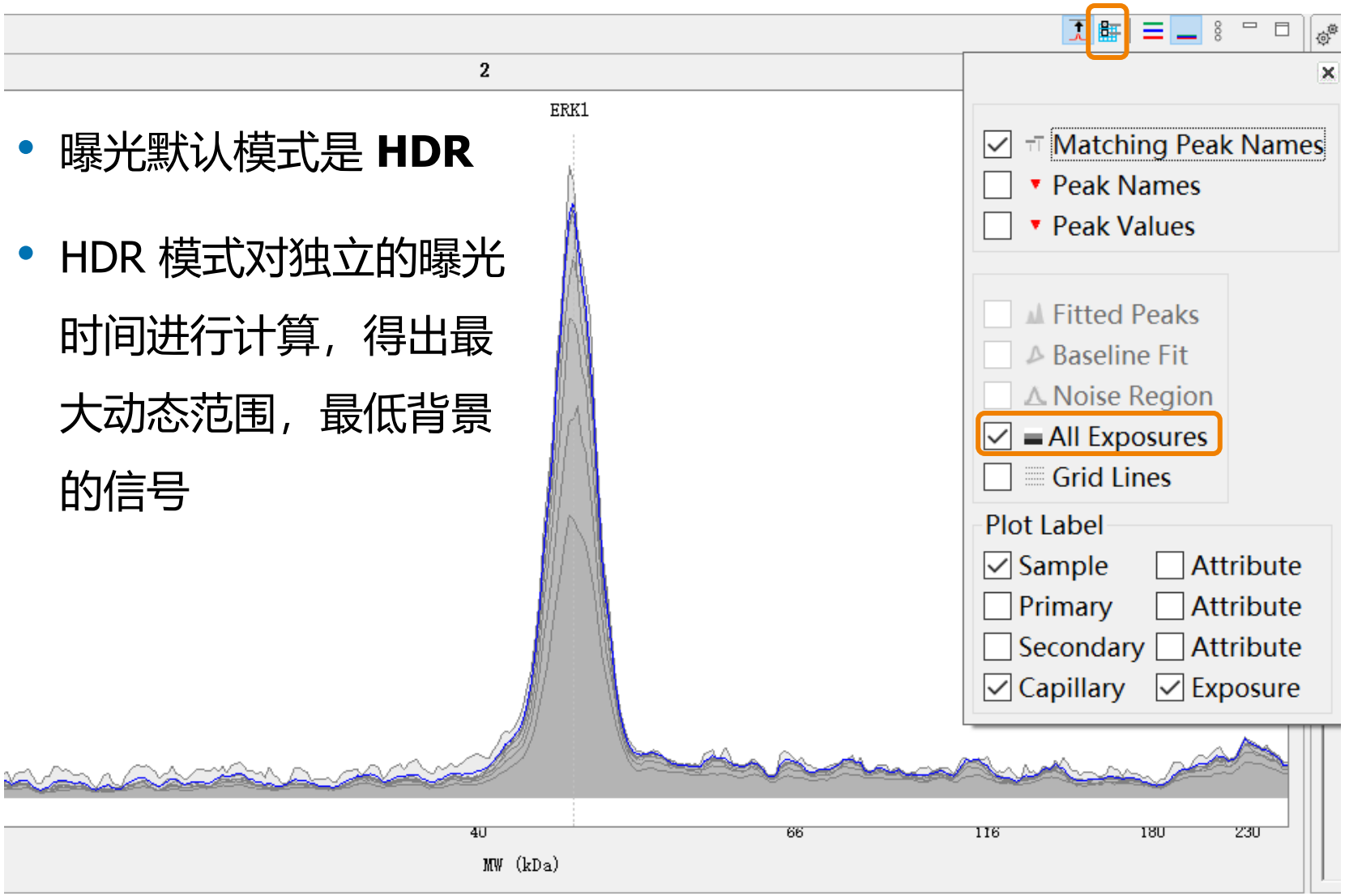
* 在没有 ladder 识别的情况下, Compass 软件依赖于每个毛细管内的**荧光内参**进行分子量计算

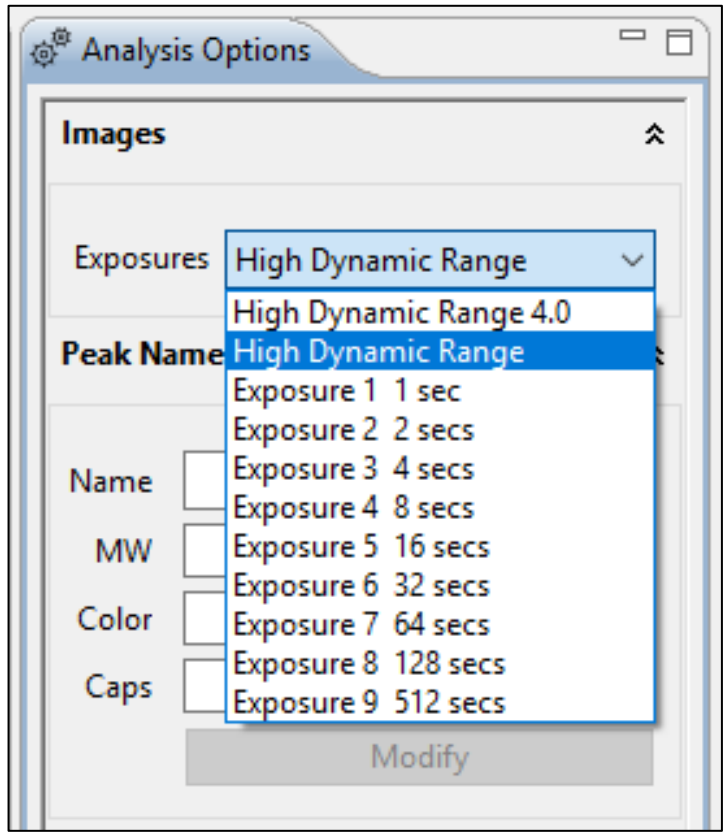
3. 化学发光信号无过曝



3. 化学发光信号无过曝

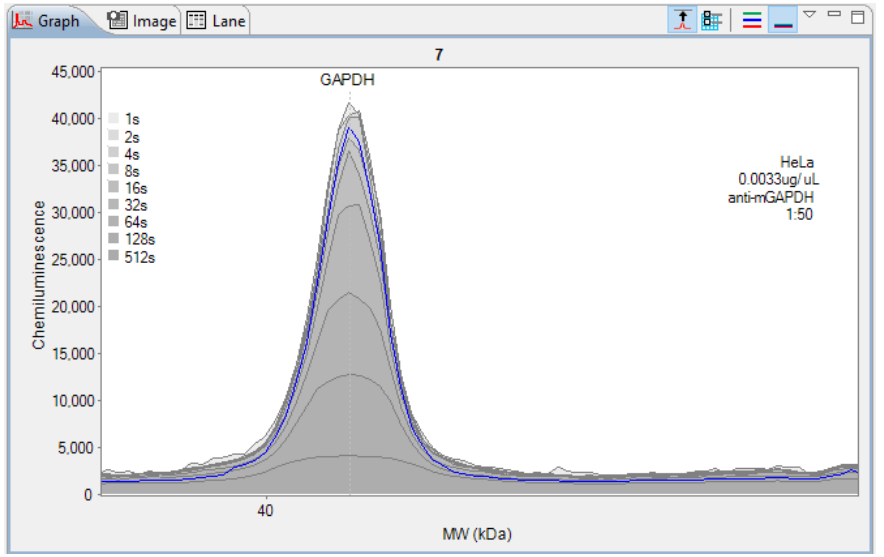
- 曝光默认模式是 **HDR**
- HDR 模式对独立的曝光时间进行计算，得出最大动态范围，最低背景的信号



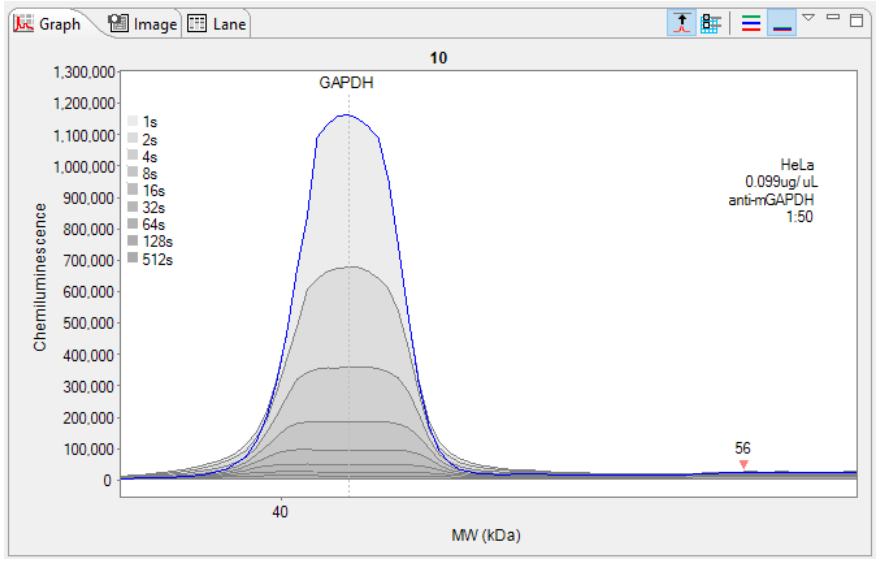


3. 化学发光信号无过曝

- 化学发光信号实际上是信号/时间的比值.
  - 在长曝光时间中，信号衰减，所以峰高下降
- 如果您看到在前几个曝光时间中，某个峰的信号明显下降，说明:
  - 化学发光底物消耗完
  - 该信号超出了动态范围
- 保持化学发光的峰高小于**300,000**



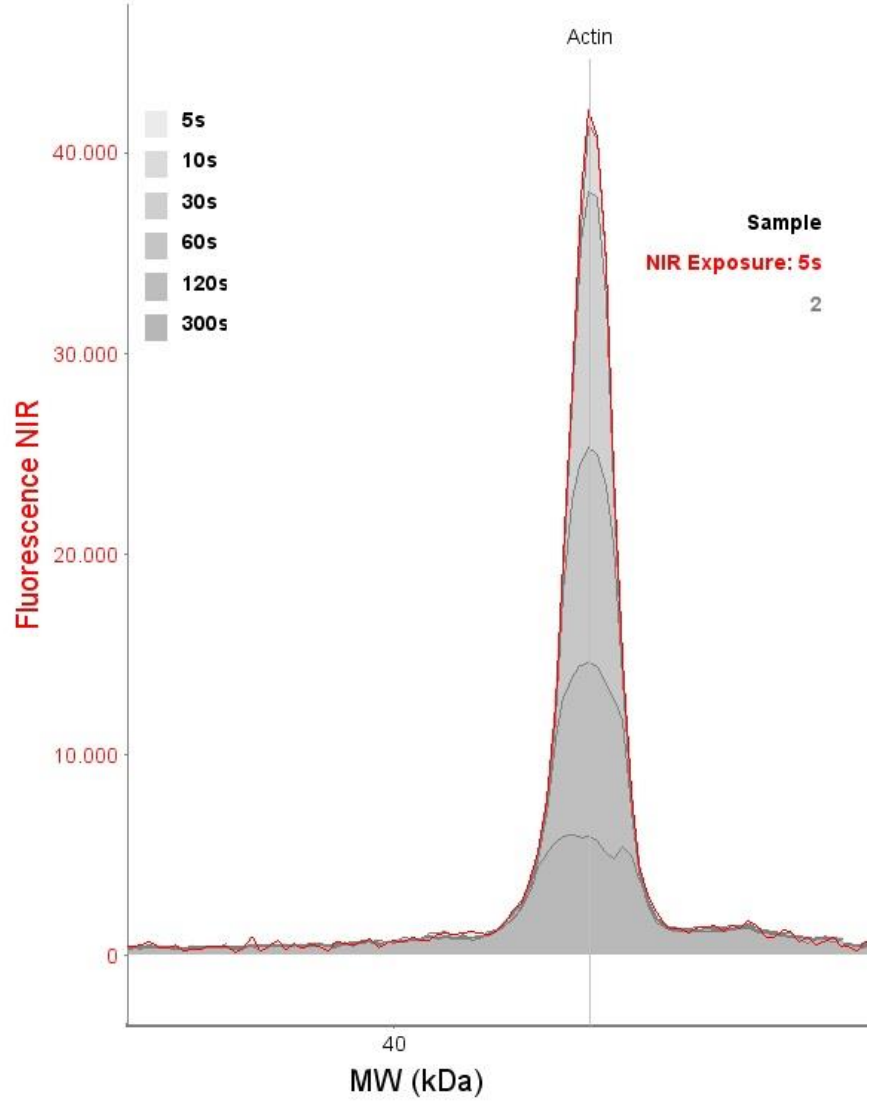
正常信号



过曝信号

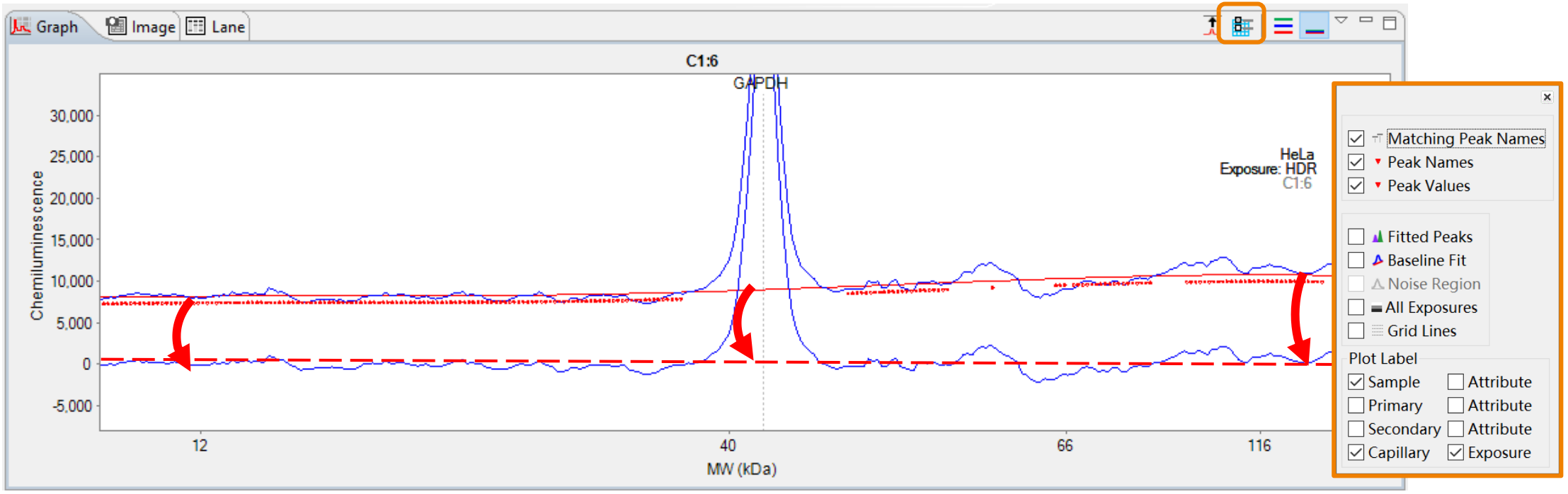
4. 荧光通道相机无饱和（JESS）

- 在 NIR 通道中，信号太强有可能导致相机像素饱和
- 一旦观察到信号开始下降，说明相机饱和，最小的两个曝光时间峰应该重叠，否则说明相机较快饱和
- 分析数据时，建议选择HDR模式
- 保证荧光检测的峰高低于 60,000



5. 背景无过高——基线拟合

- 软件默认显示扣除背景后的信号曲线 (背景设为0)
- 要观察基线, 需要勾选 “Baseline fit”；基线参数设置在 Edit→Analysis...中
- 软件根据基线下面的点拟合出基线，可添加或删除基线点

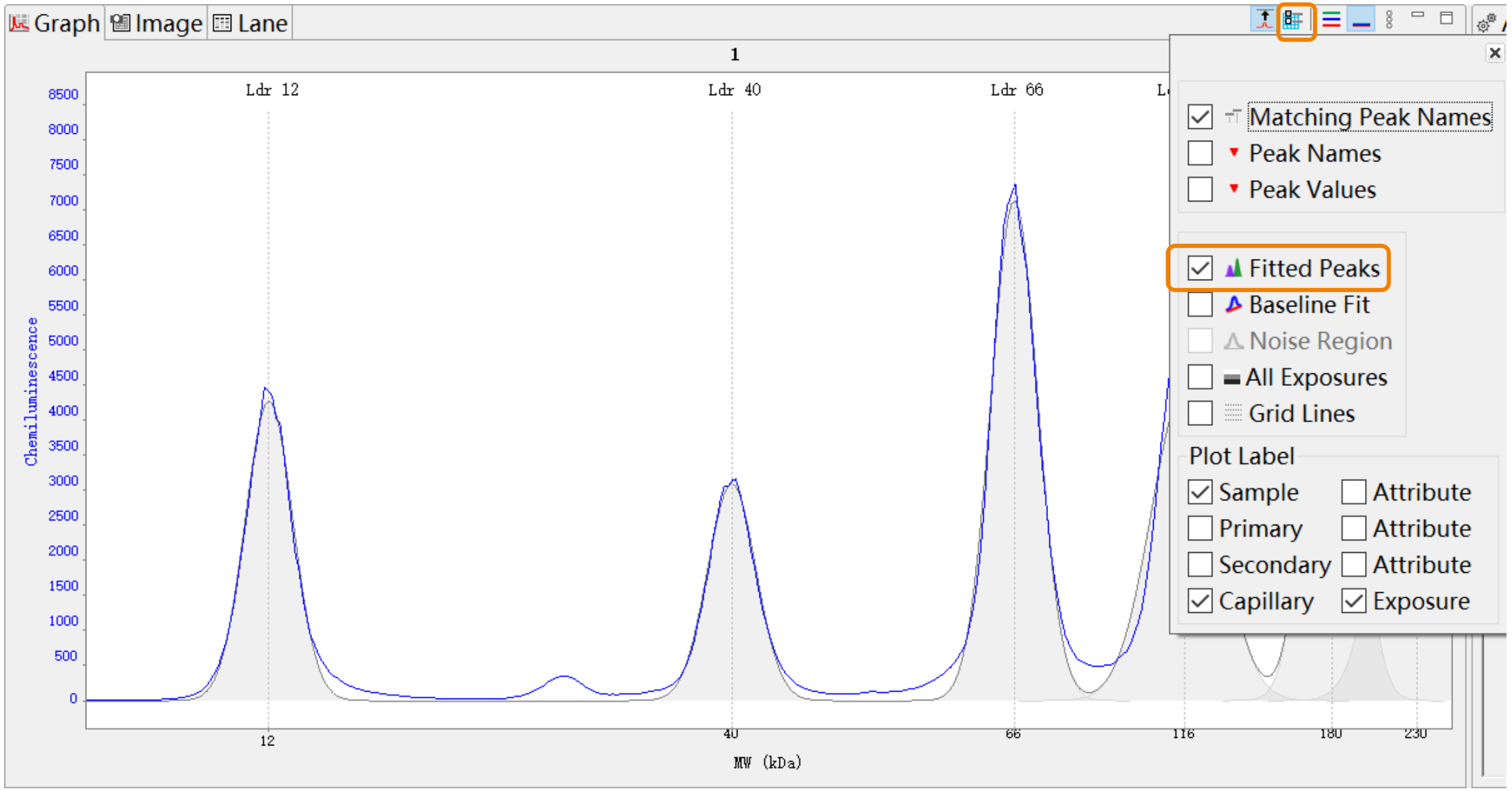


5. 背景无过高——基线拟合

- 为什么高背景是个问题?
  - 信号饱和风险
  - 显著减弱动态范围
  - 降低检测灵敏度

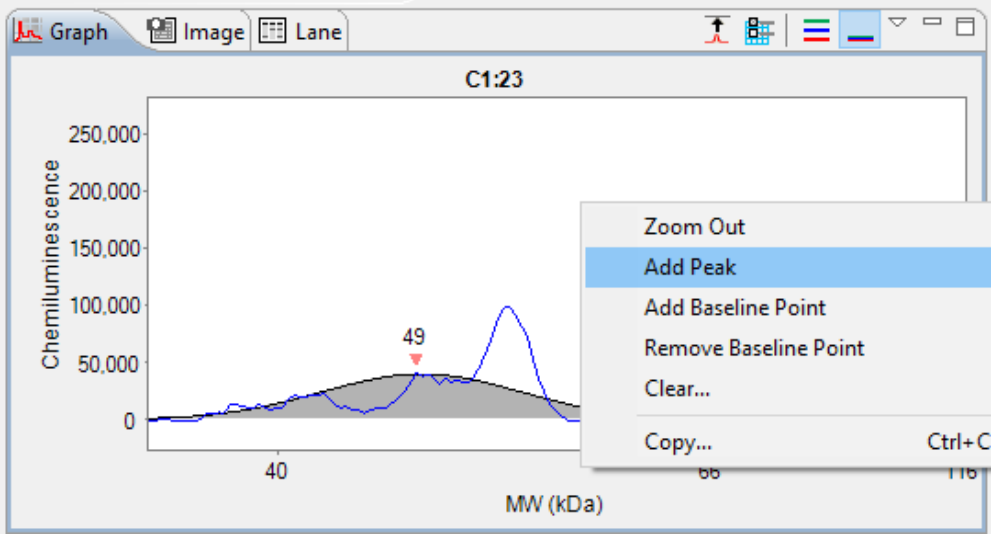
样品	一抗	毛细管号	峰序号	峰名	迁移位置	分子量	峰高	峰面积	相对峰面积	峰宽	信噪比	基线拟合
Sample	Primary	Cap	Peak	Name	Position	MW (kDa)	Height	Area	% Area	Width	S/N	Baseline
Biot. Ladder	Blocking	1	1	Ldr 12	355	12	4279.4	66444.9		14.6	1667.0	22.5
Biot. Ladder	Blocking	1	2	Ldr 40	476	40	3095.9	49008.2		14.9	1180.9	35.6
Biot. Ladder	Blocking	1	3	Ldr 66	549	66	7139.7	109106.0		14.4	2831.7	40.0
Biot. Ladder	Blocking	1	4	Ldr 116	593	116	4454.0	97617.1		20.6	1743.1	41.4
Biot. Ladder	Blocking	1	5	Ldr 180	633	180	7471.2	111393.5		14.0	2652.4	41.8
Biot. Ladder	Blocking	1	6	Ldr 230	654	230	6921.9	137776.2		18.7	2454.0	41.8
HeLa Lysate	ERK1 RTU	2	1	ERK1	486	48	5940.1	80205.3	100.0	12.7	412.8	183.9

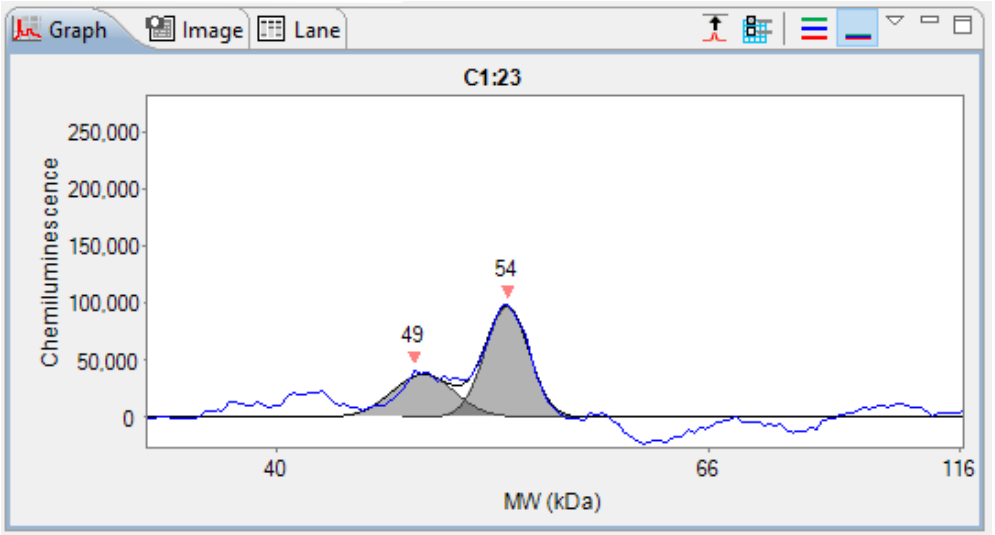
5．峰面积正常



5. 峰面积正常

- 灰色部分的面积即峰面积.
- 需确认拟合峰跟实际峰形拟合良好
- 右键单击可通过 “add peak” 或 “remove peak” 增加或去除峰
- 在 analysis 菜单中，可选择拟合方式, 包括 gaussian fit（高斯拟合）vs dropped lines（垂直拟合，推荐总蛋白定量时使用）





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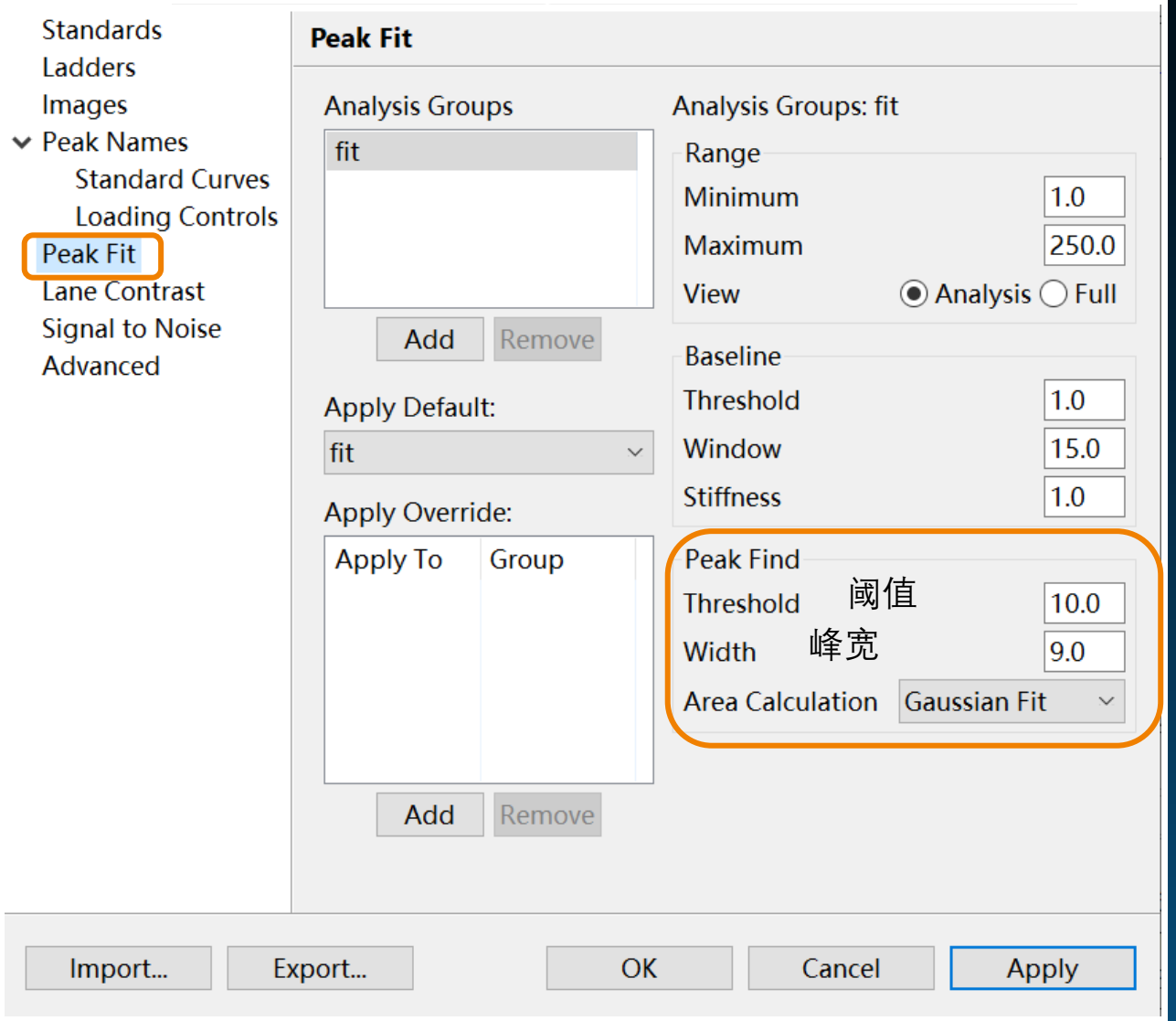

数据分析前检查

- 确认完成了以下检查

  - ✓ 荧光内参整齐并识别良好
  - ✓ Ladder 识别良好
  - ✓ 化学发光信号无过曝
  - ✓ 荧光通道相机无饱和（Jess）
  - ✓ 背景无过高
  - ✓ 峰面积正常

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→ 可以开始分析数据了

01

Compass 介绍

02

数据分析前检查

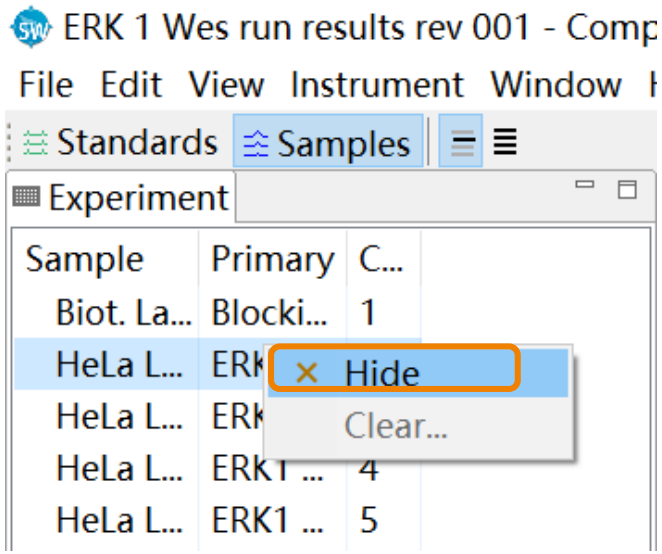
03

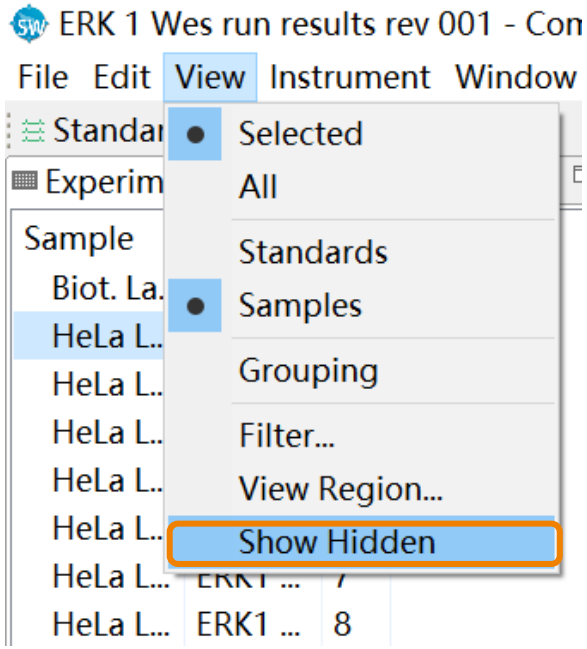
数据分析

编辑实验信息

- 样品及抗体信息等在 Assay 界面输入
  - Assay template 里输入的信息可以随时更改（运行前/后）

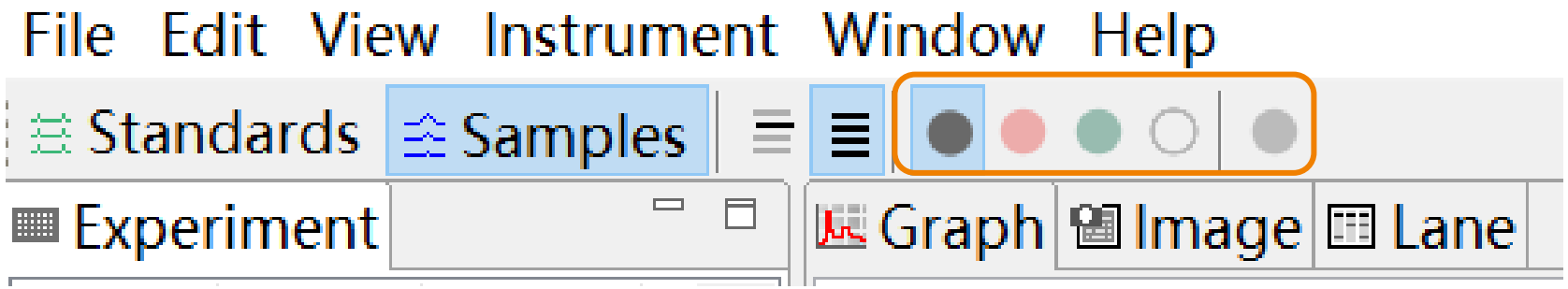
- 右键点击可隐藏泳道
- 如果要显示隐藏的泳道，点击:
  - *View→Show Hidden*
  - 右键点击 unhide 恢复





选择检测通道

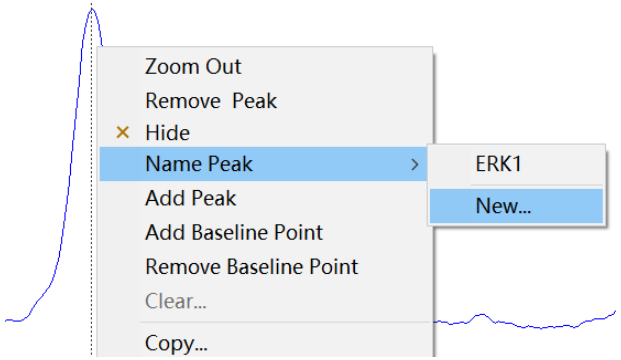
- 毛细管/泳道可选择性浏览或者全局浏览
- 检测通道可进行开/关
- 选择不同的通道，将有不止一个Y轴



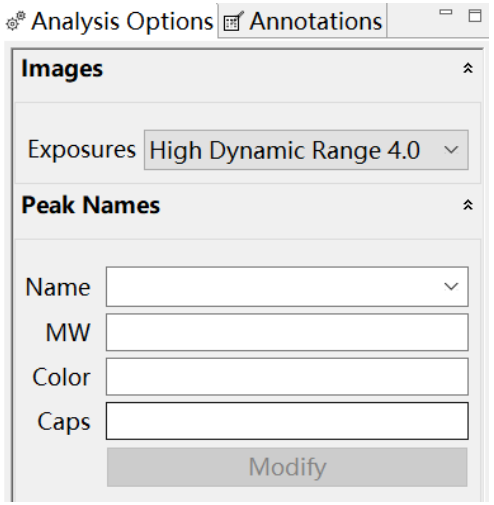
峰命名

当您查看数据时，标记您的峰值很有帮助

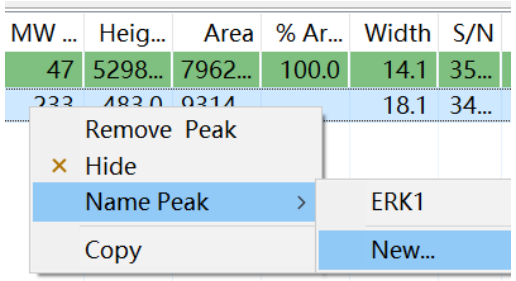
- 选项 1: 右键点击峰形图中的峰，选择 Name Peak → New...进行命名



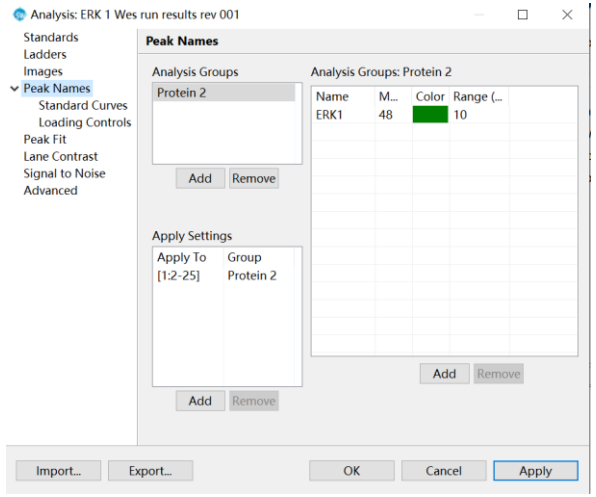
- 选项 2: Analysis Options 窗格里
  - 在 Name 中: 下拉选中 [New]
  - 输入峰名称等
  - 单击 Create



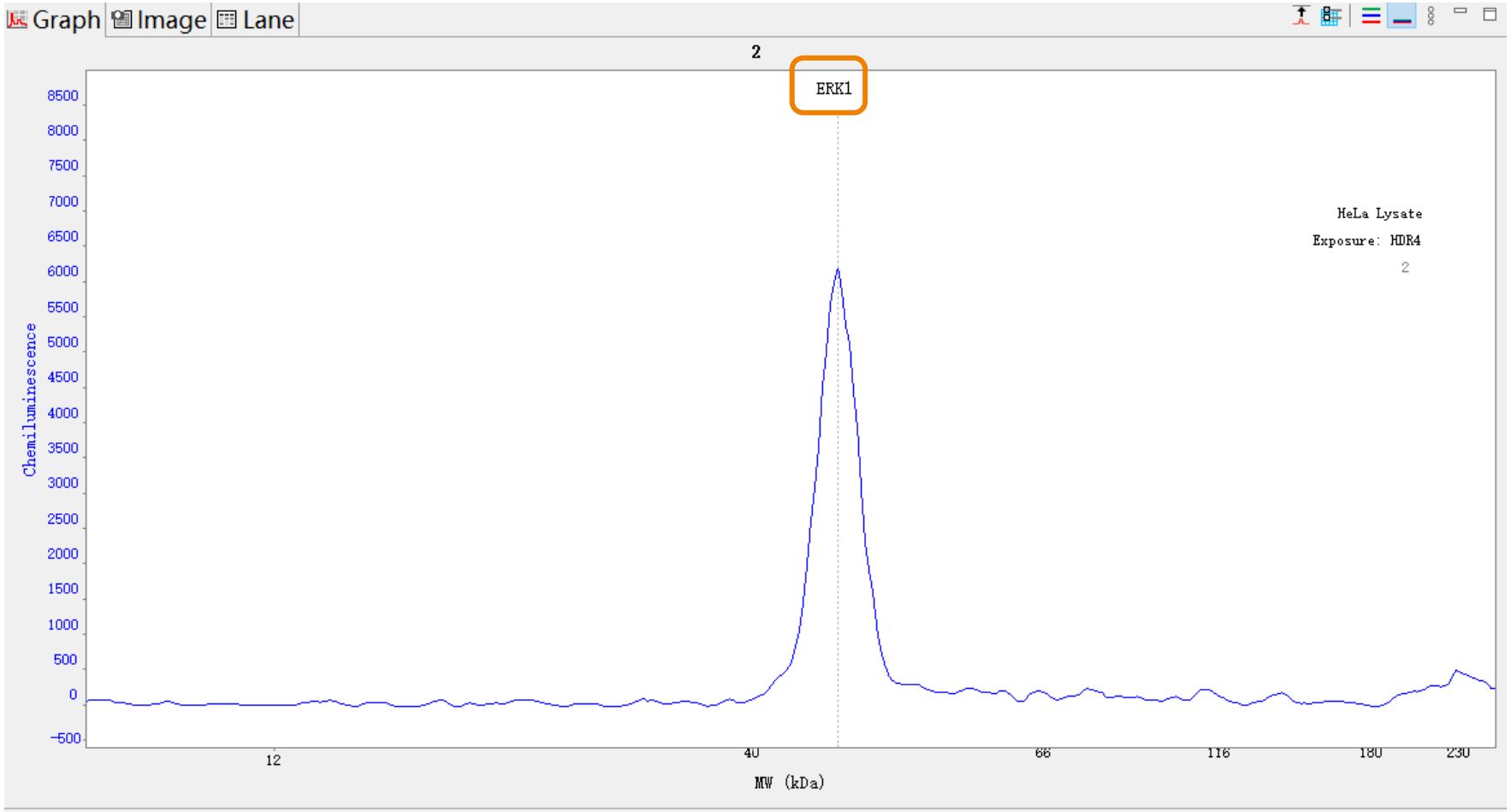
- 选项 3: 右键点击峰统计表中的峰，选择 Name Peak → New...进行命名



- 选项 4: 在Edit > Analysis 菜单栏中
  - 在 Peak Names 栏中进行峰命名



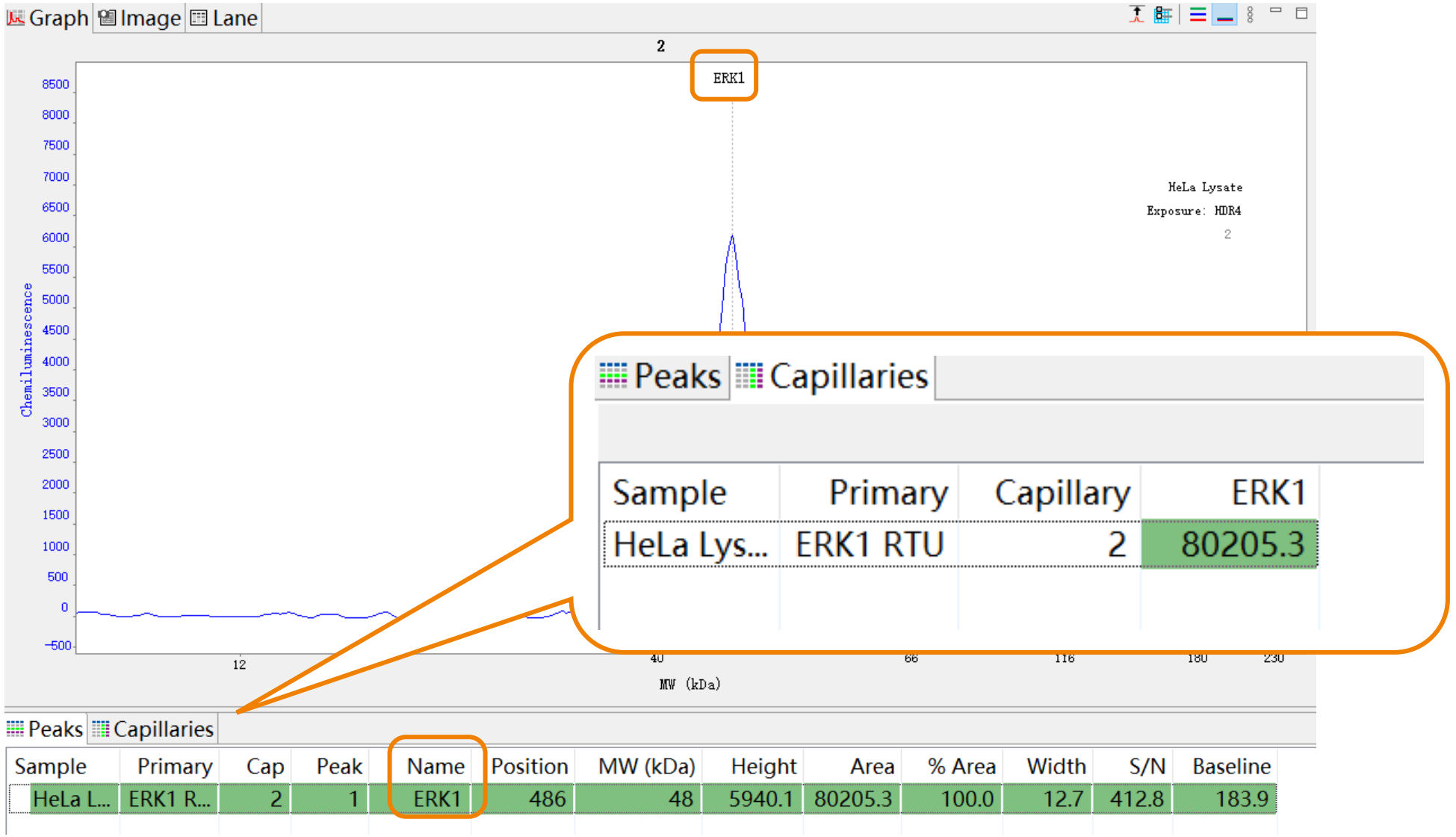
峰命名



Peaks | Capillaries

Sample	Primary	Cap	Peak	Name	Position	MW (kDa)	Height	Area	% Area	Width	S/N	Baseline
HeLa L...	ERK1 R...	2	1	ERK1	486	48	5940.1	80205.3	100.0	12.7	412.8	183.9

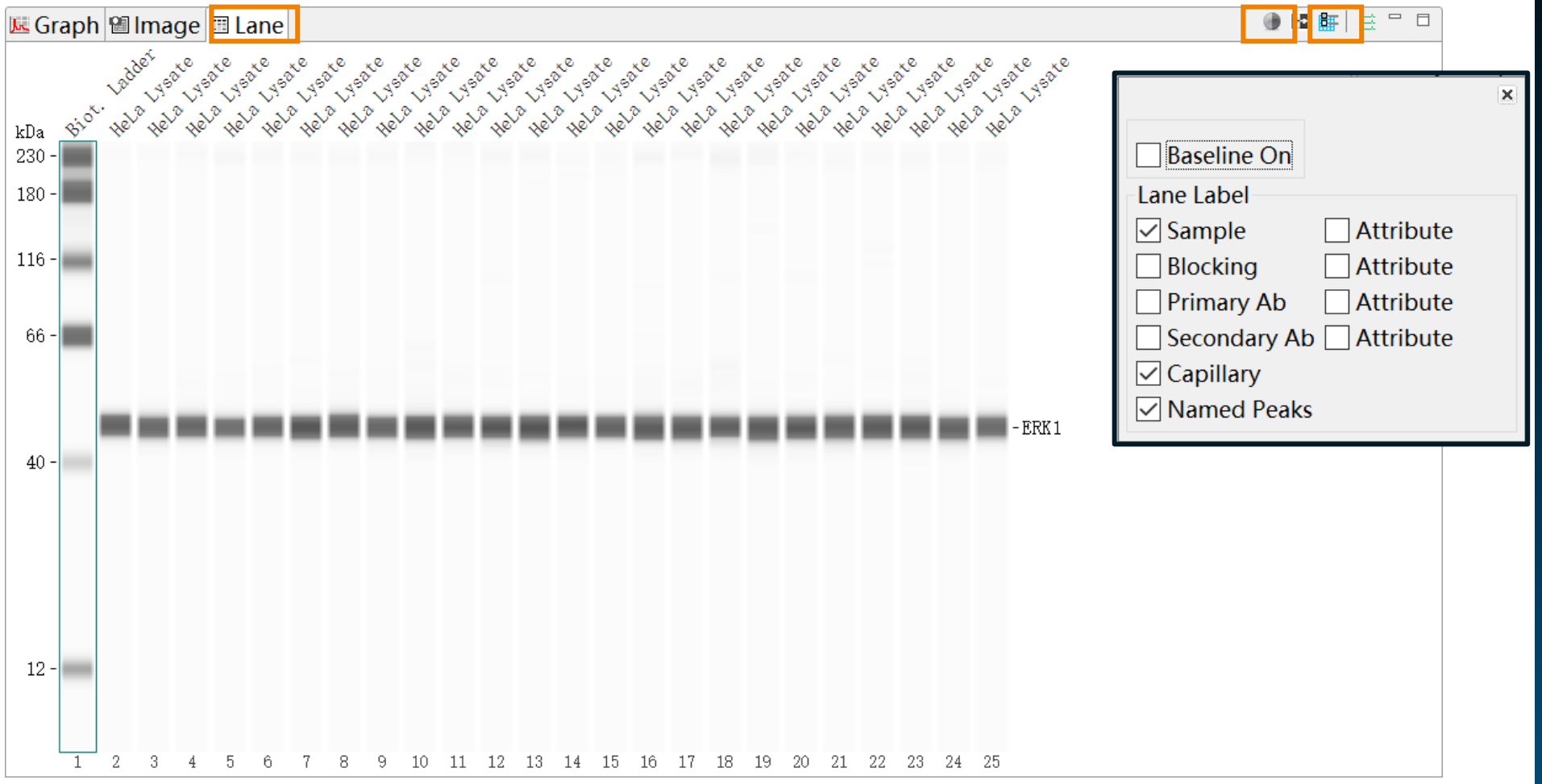
峰命名



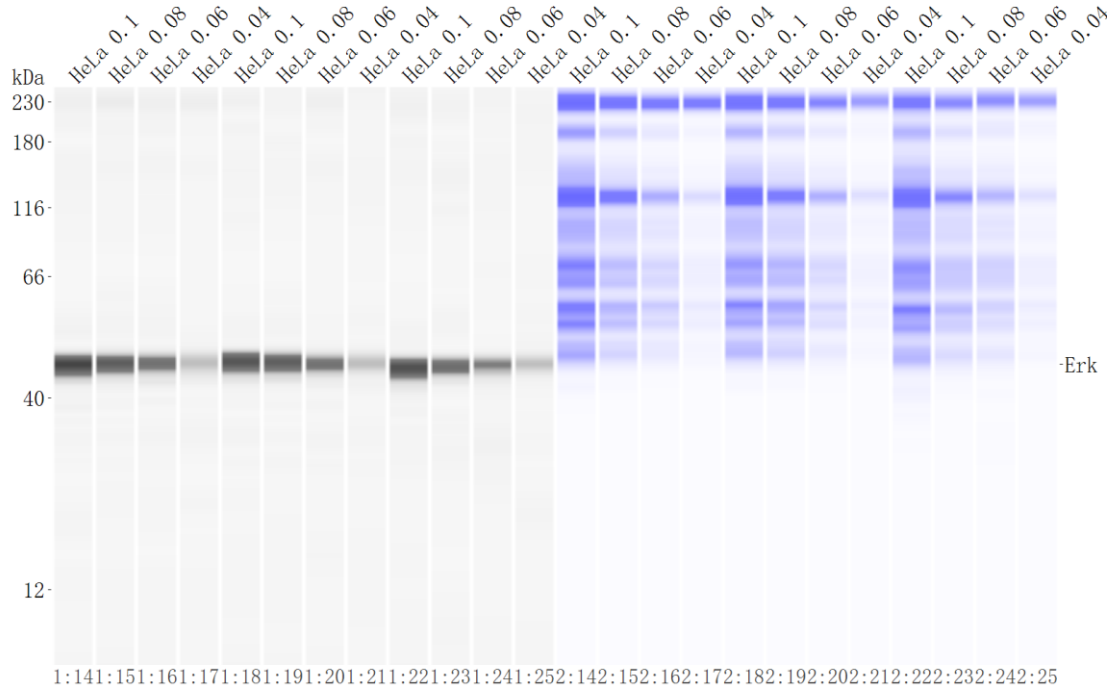
ANALYSIS 界面

泳道图

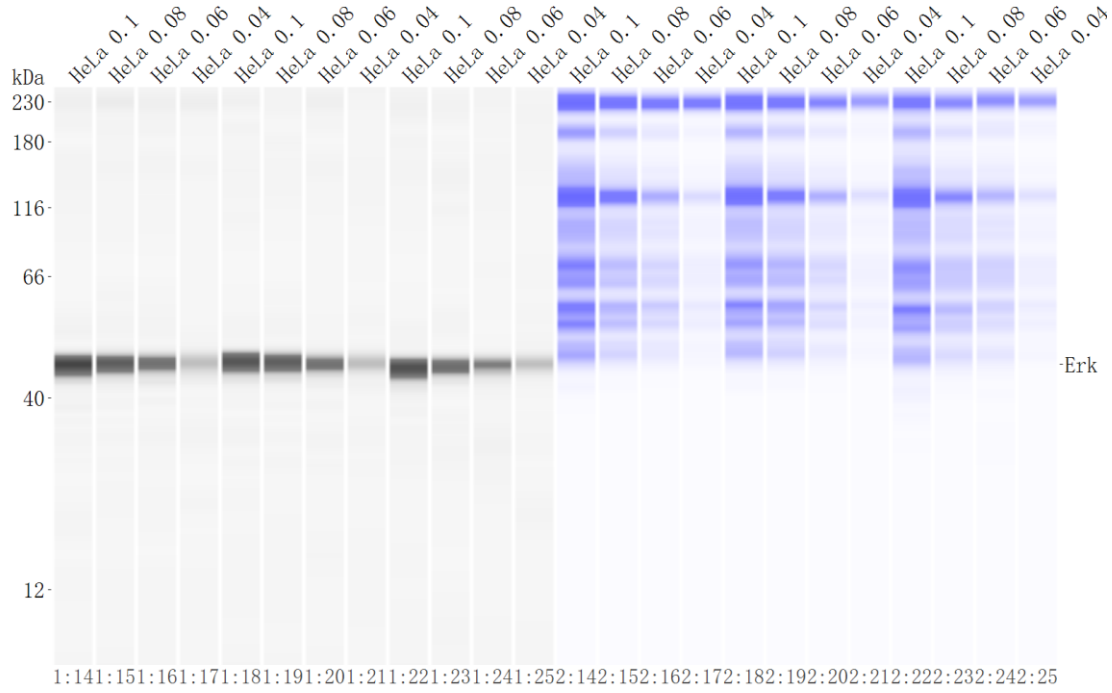
- 大部分报告的结果形式
- 可以任意显示或横向移动泳道
- 可以单独调整每个通道的对比度
  - 对比度调整仅改变图片中条带呈现效果, 峰定量结果不变

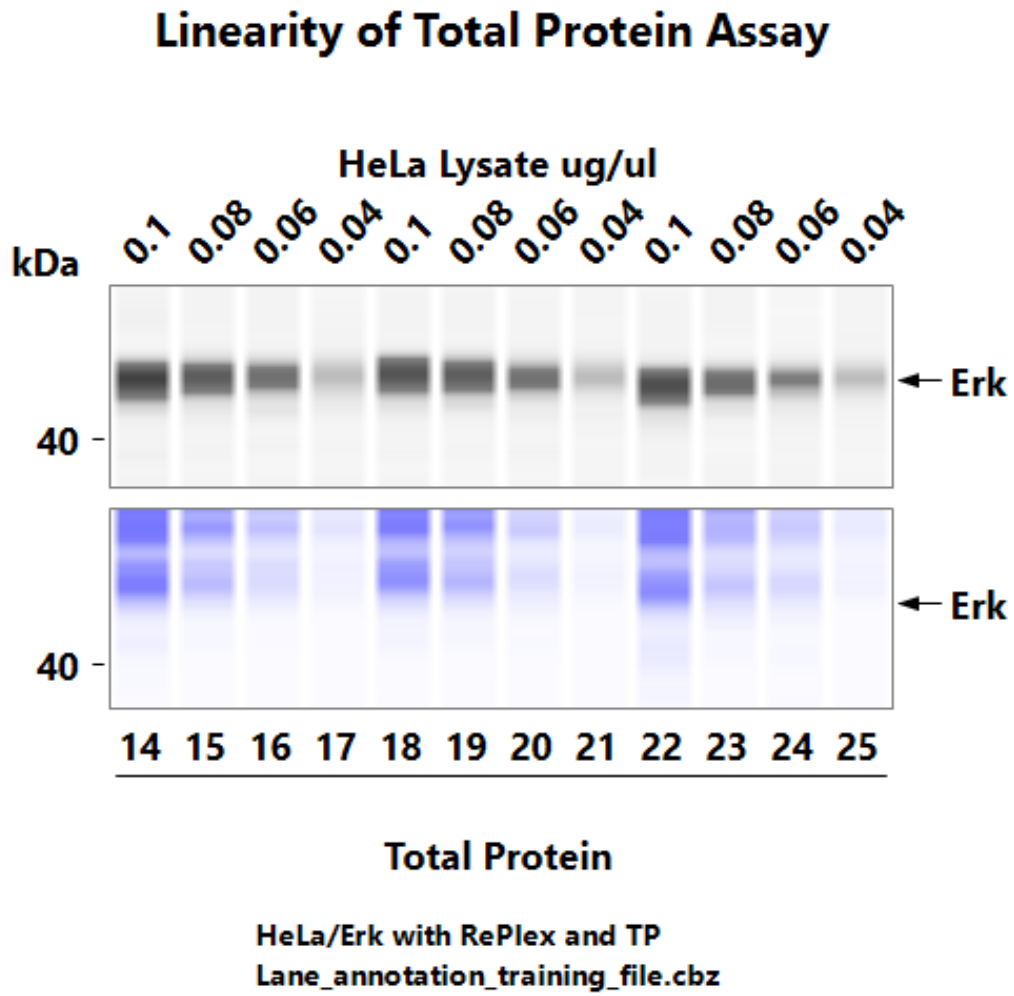


能否直接注释结果？

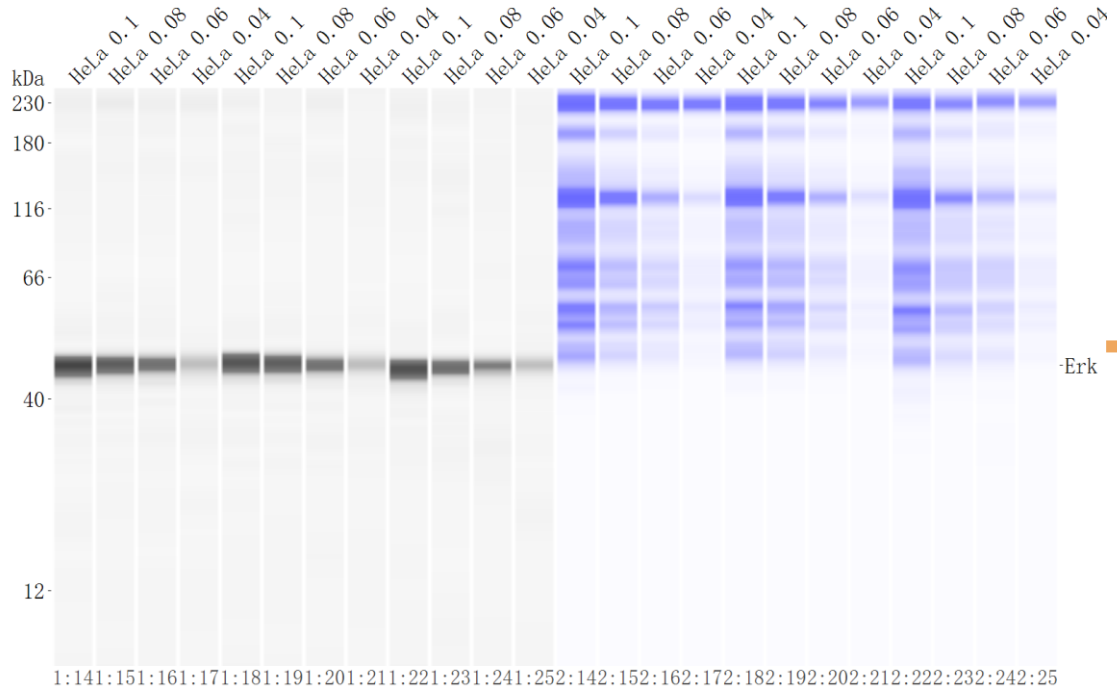


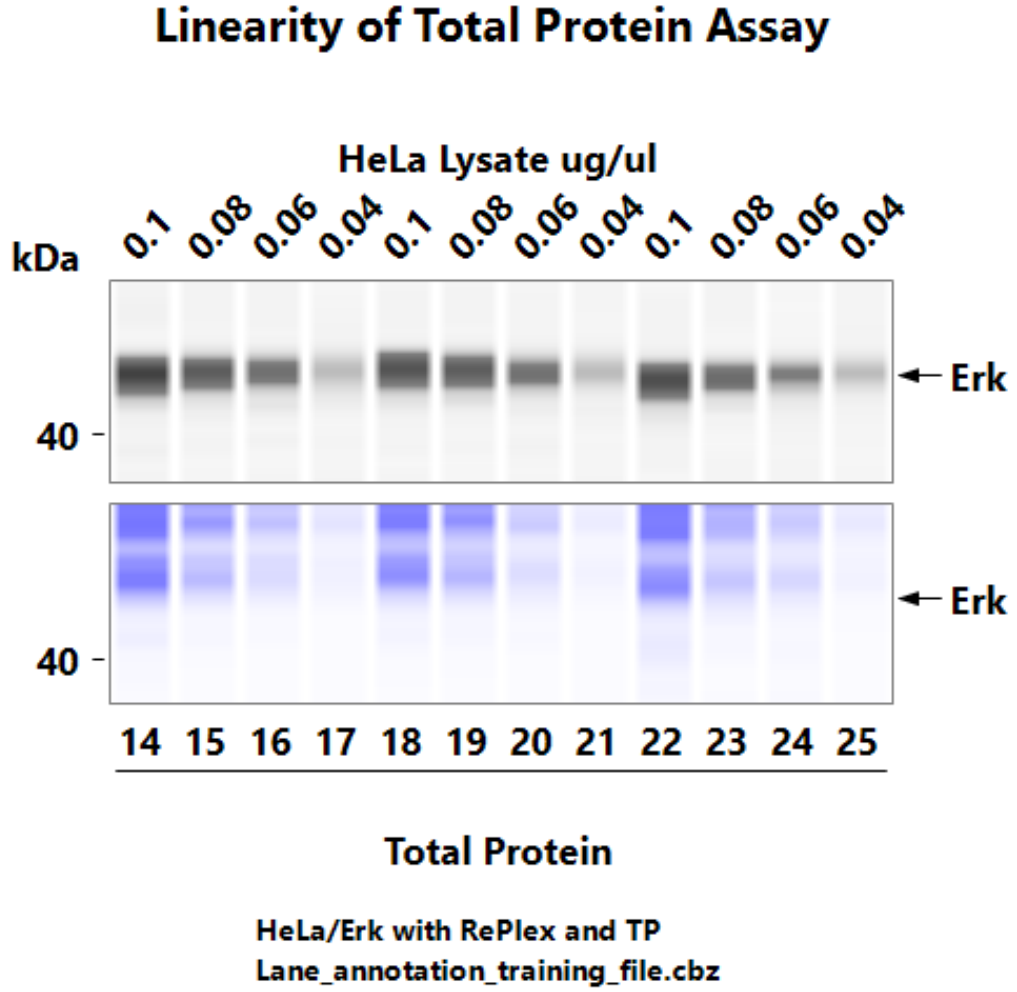
能否直接注释结果？



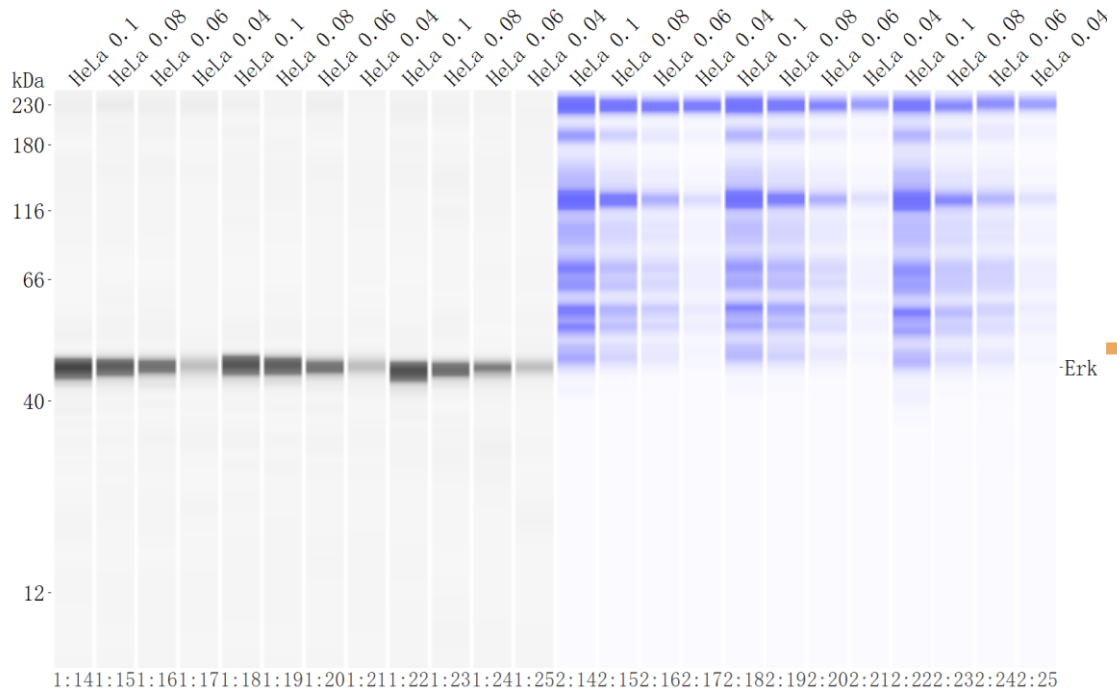


能否直接注释结果？





能否直接注释结果？



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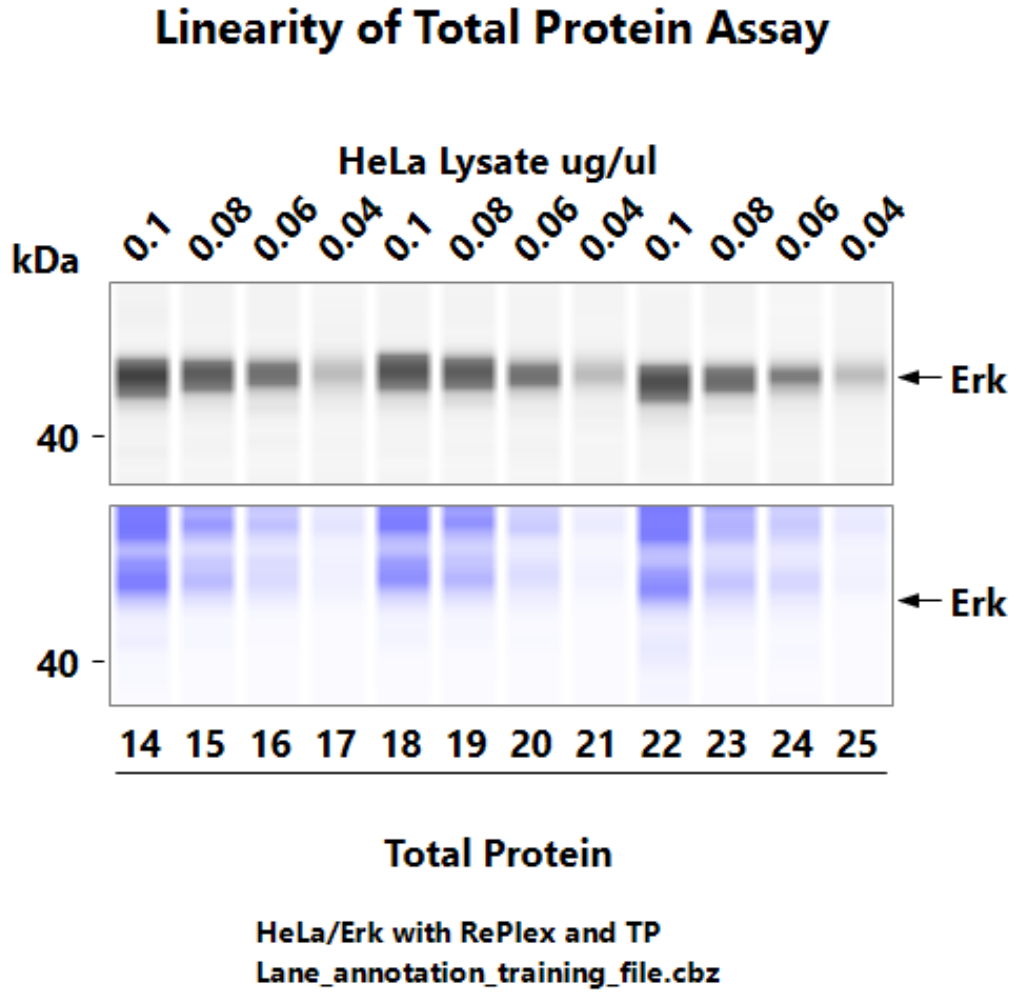
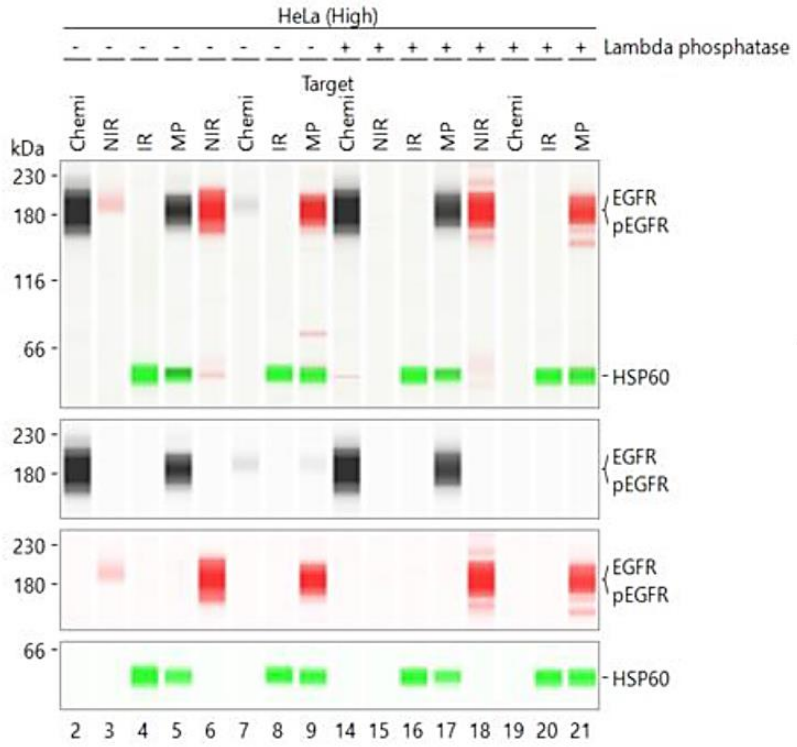


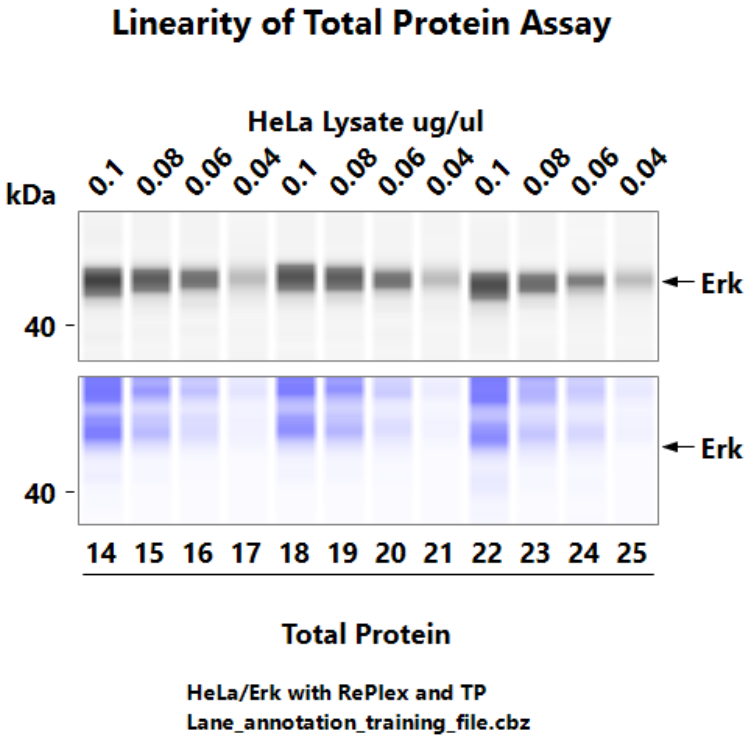
COMPASS 6.0.0 版本

适用于 WES/JESS/ABBY

COMPASS（V.6.0.0）主要更新

- 添加了Lane 结果注释





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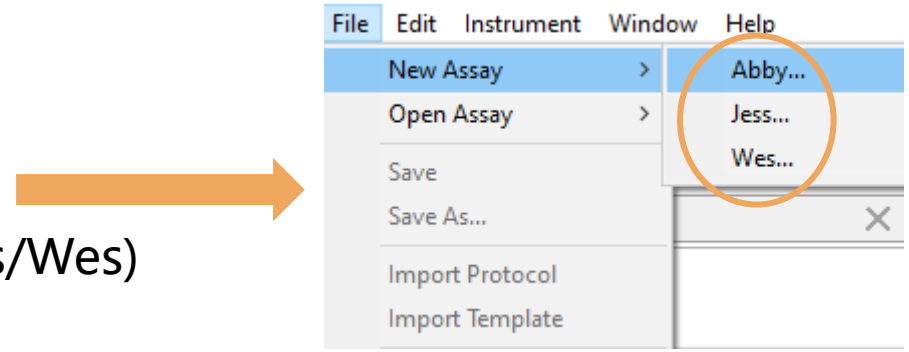

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- **添加了Lane 结果注释**
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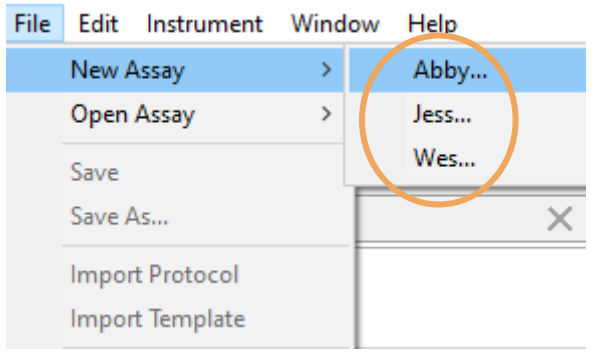

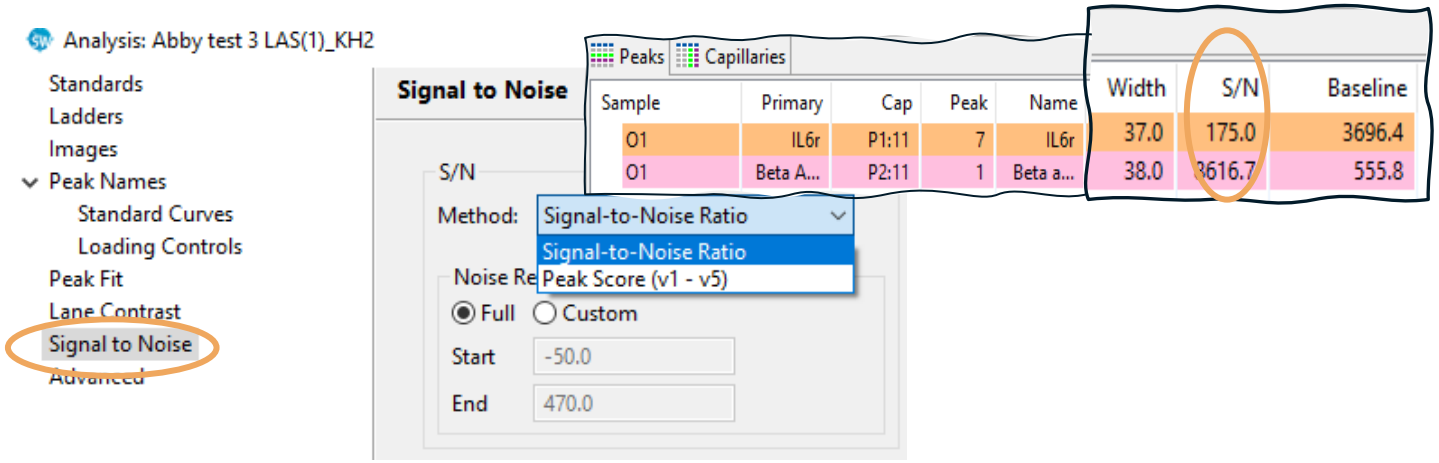

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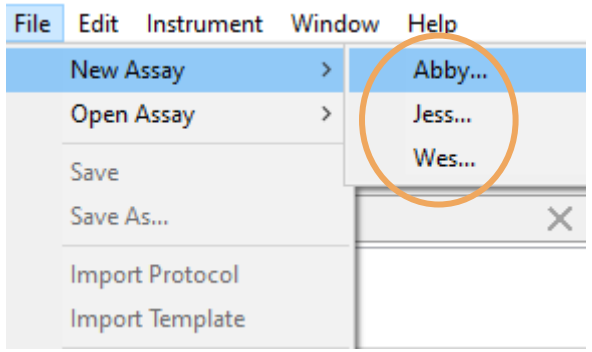

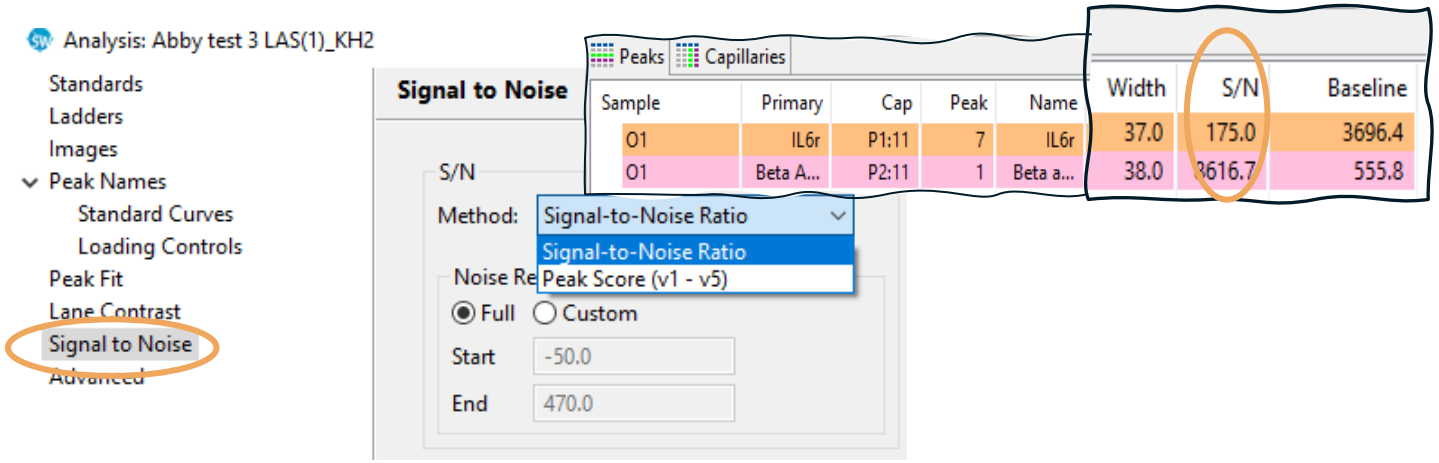

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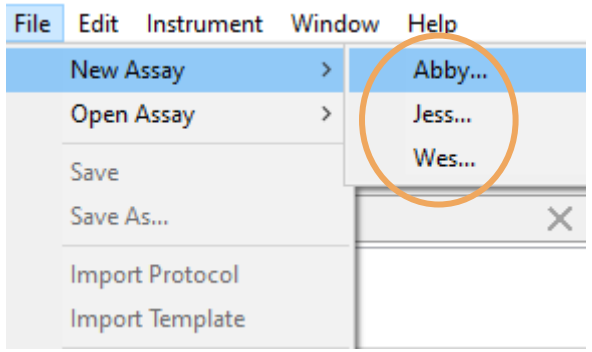
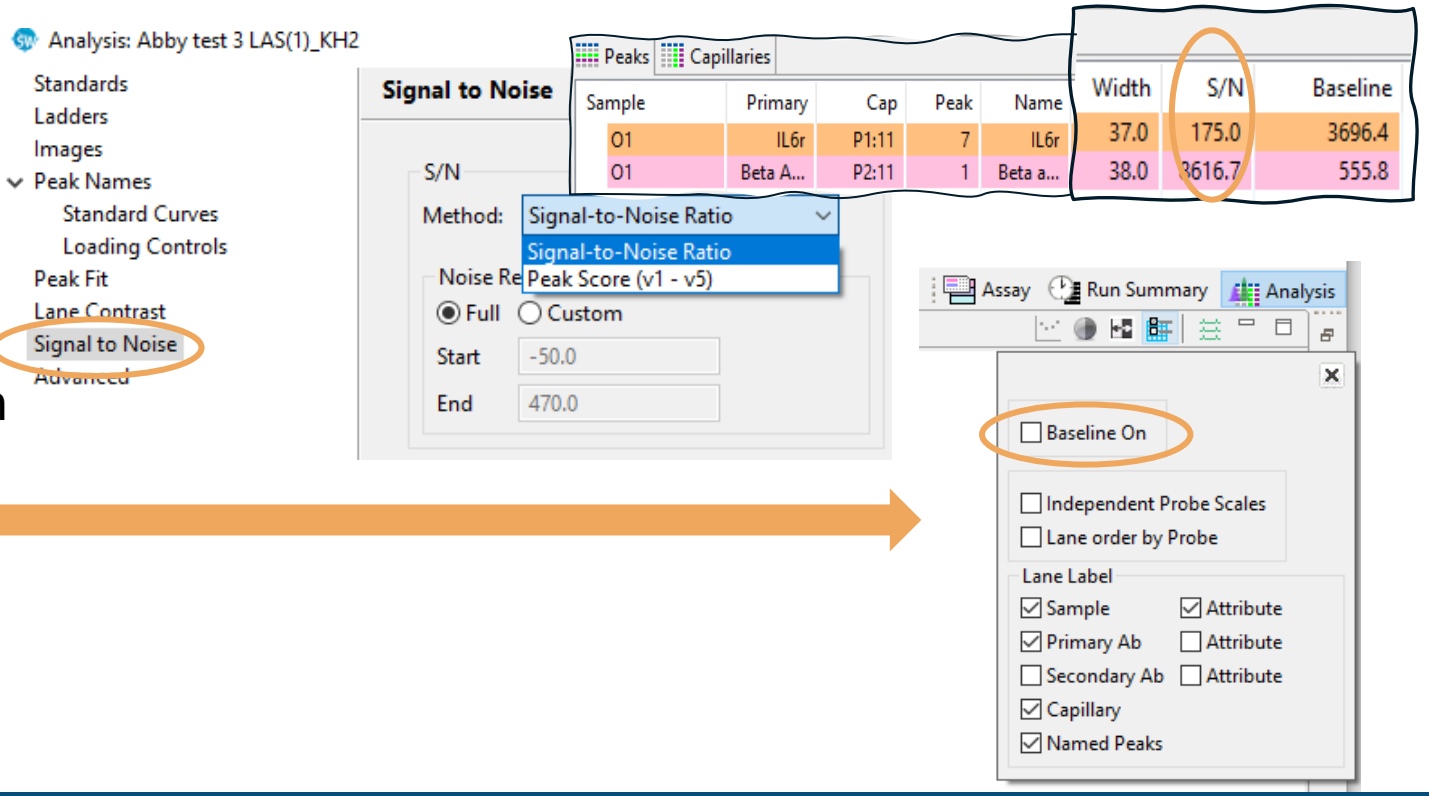
  - 基线校正的选项移动到 Lane 界面的 Graph Options内





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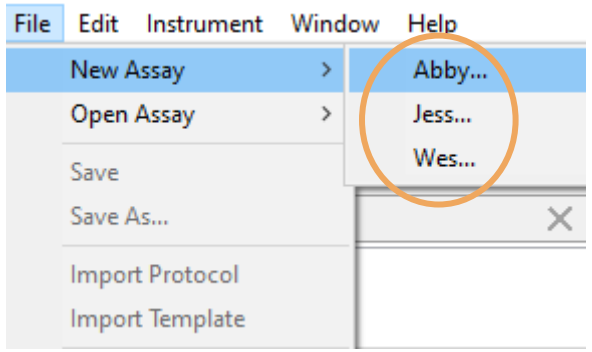
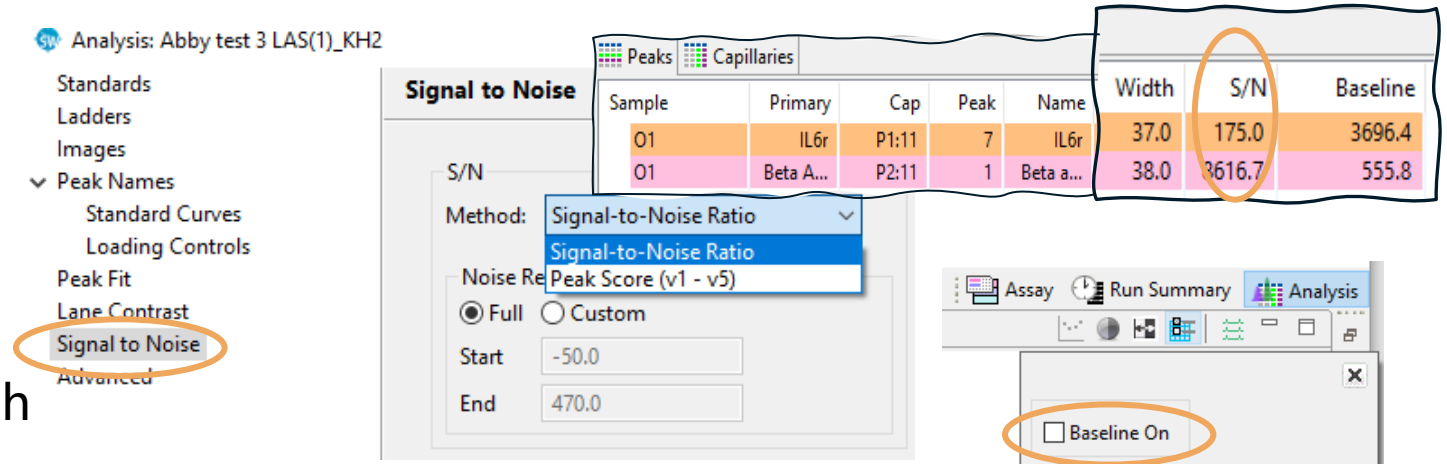
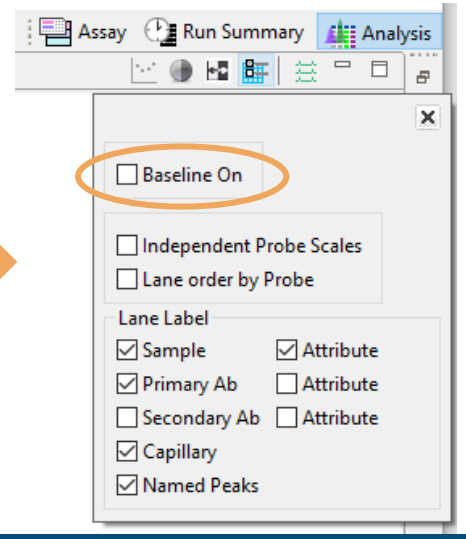
  - 支持多种格式保存结果（**TIF**/JPG/PNG）







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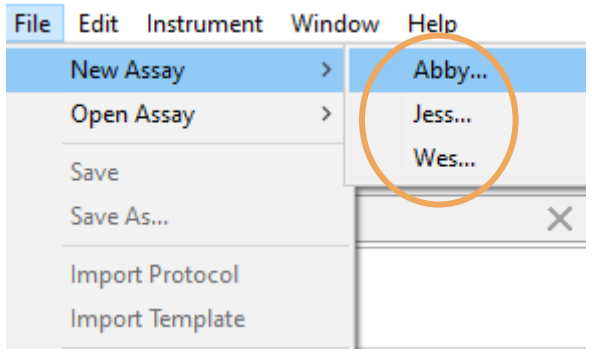
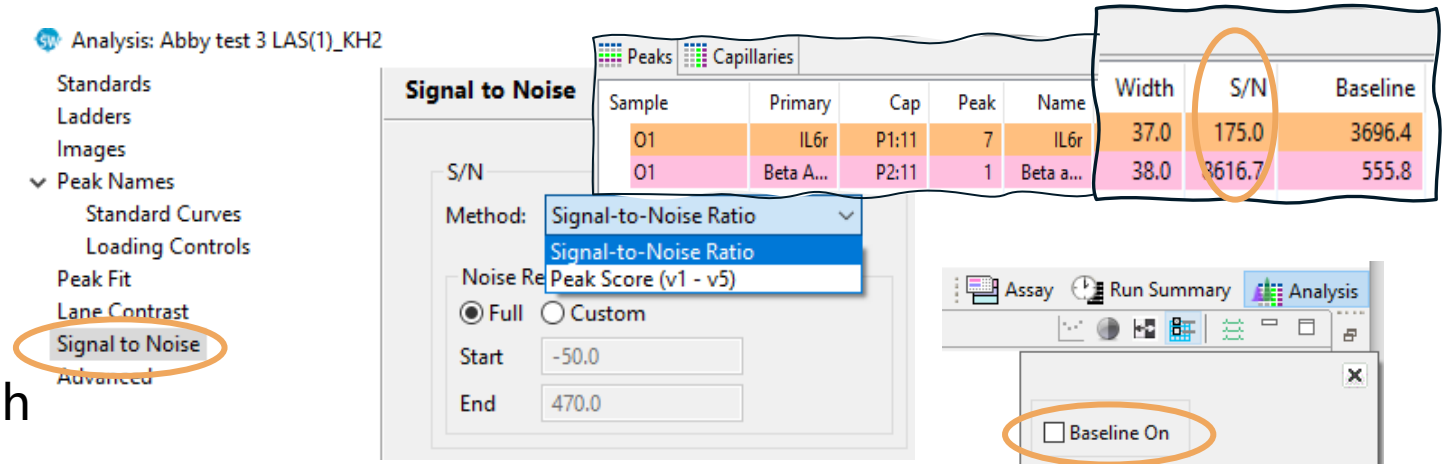
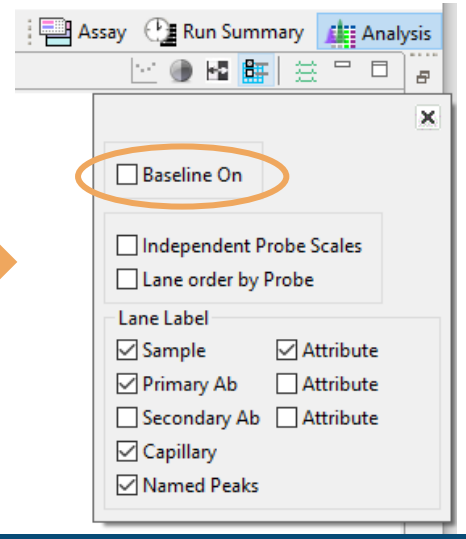


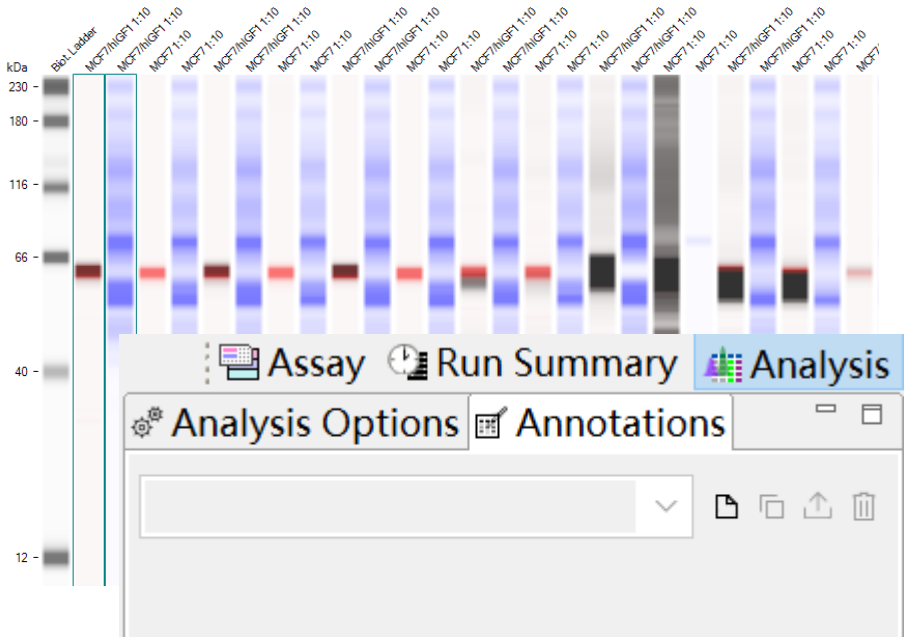




*兼容模式– Compass 6.0 版本能打开以前Jess/Wes的文件

LANE 注释

只需在 COMPASS 内即可进行注释



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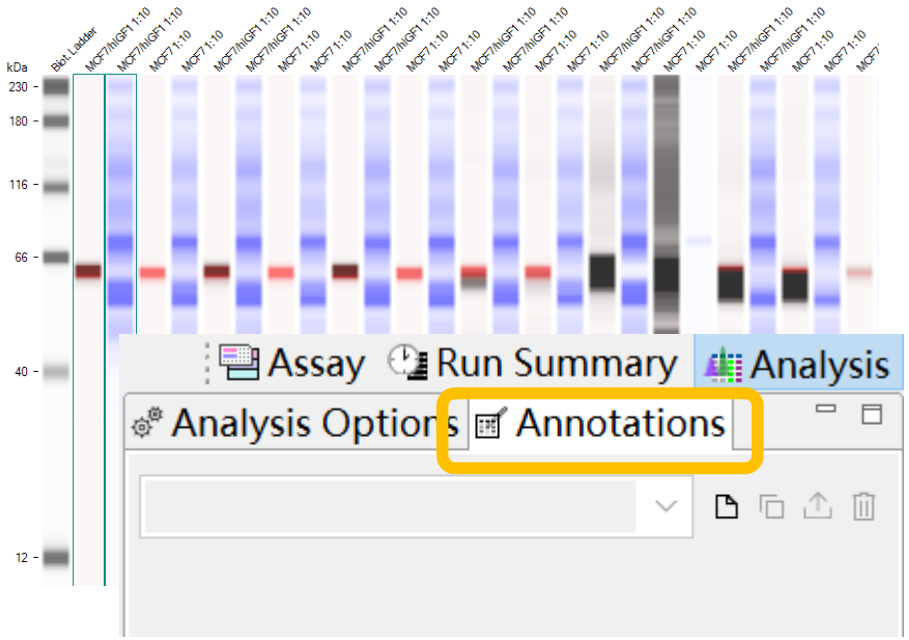

LANE 注释

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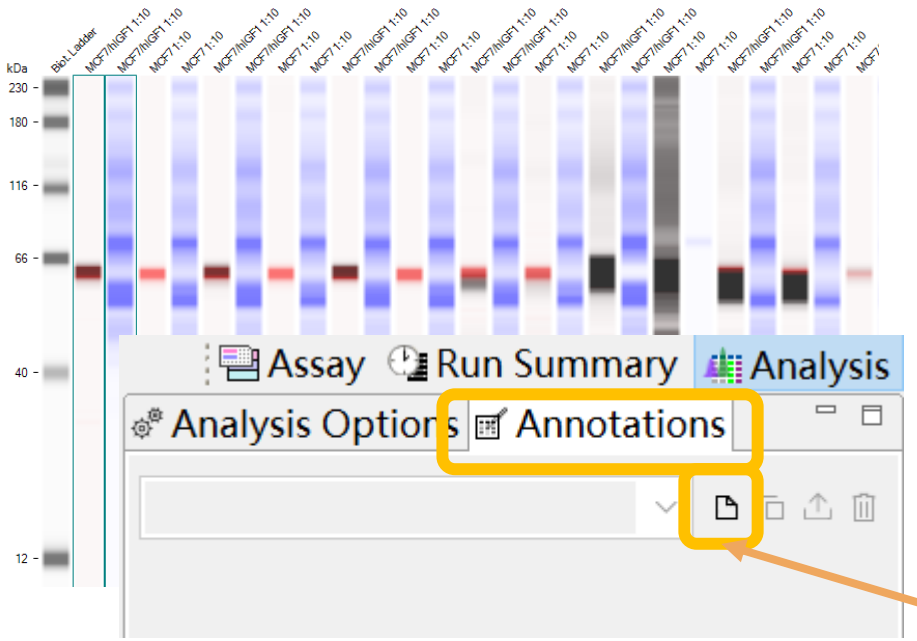

新建注释

LANE 注释

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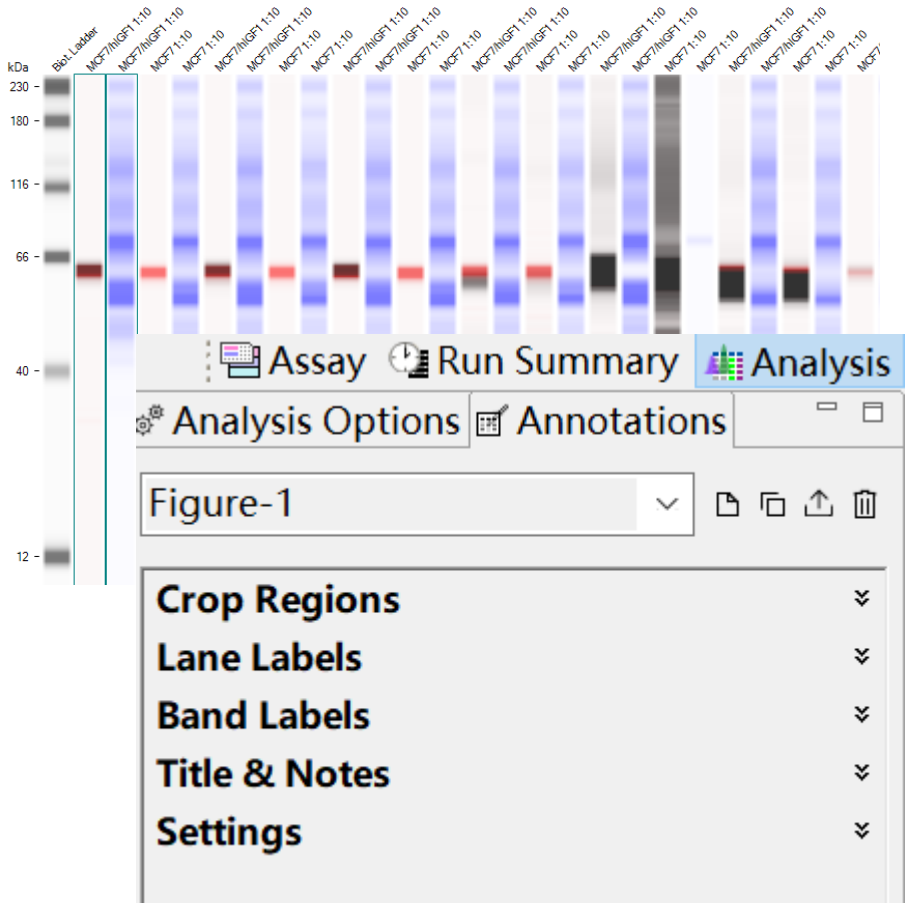

LANE 注释

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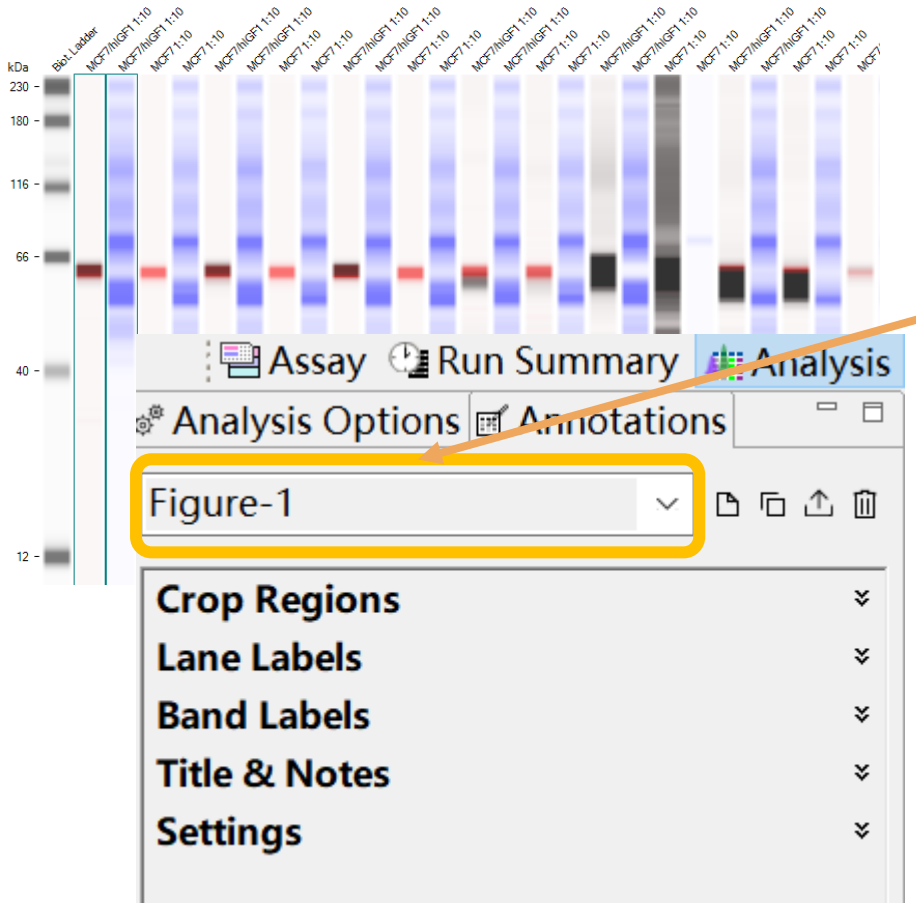

注释结果名，单击可更改

LANE 注释

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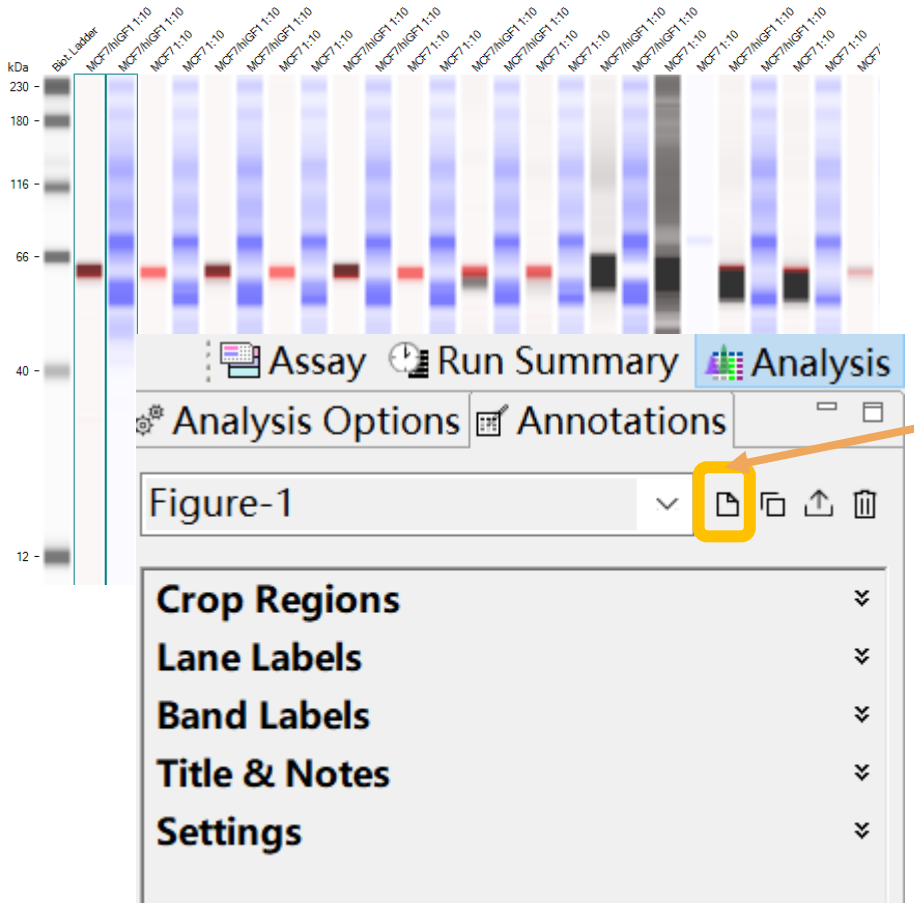

新建注释

LANE 注释

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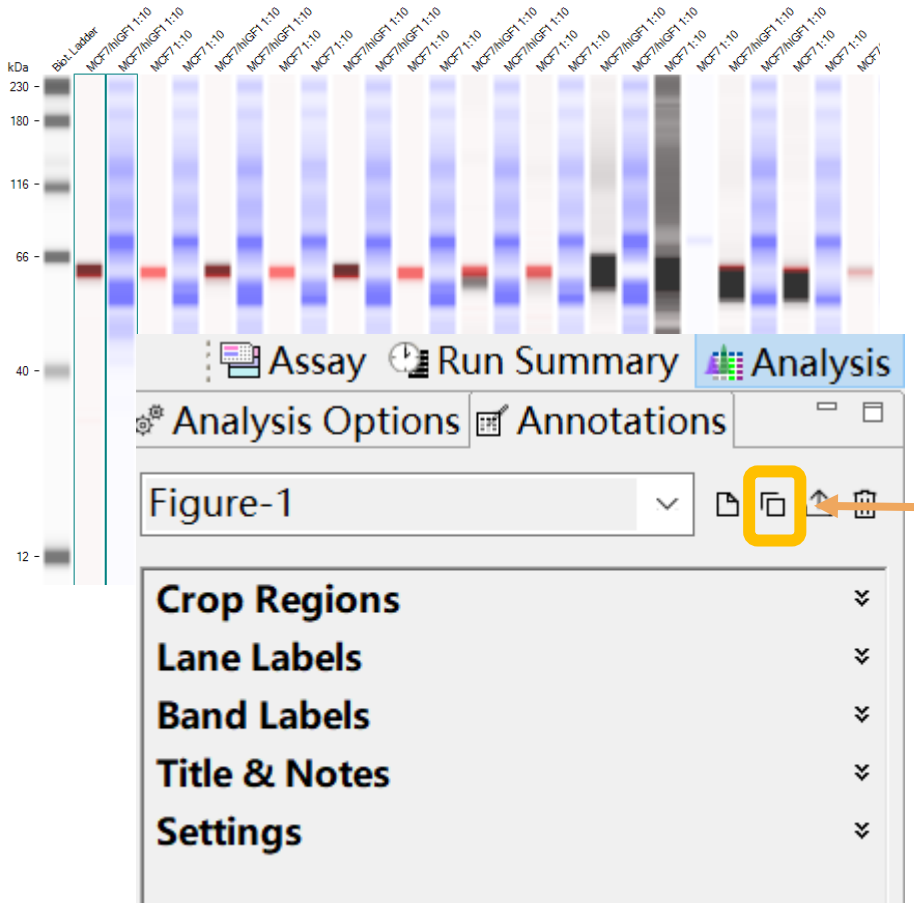

复制注释

LANE 注释

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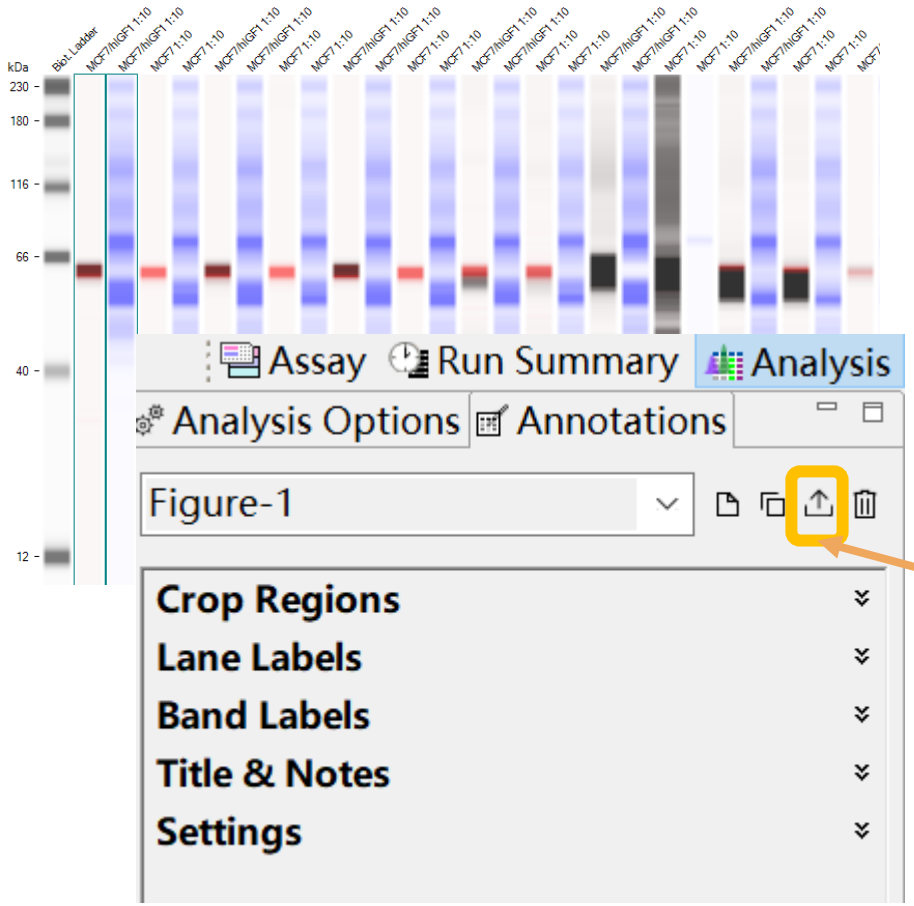
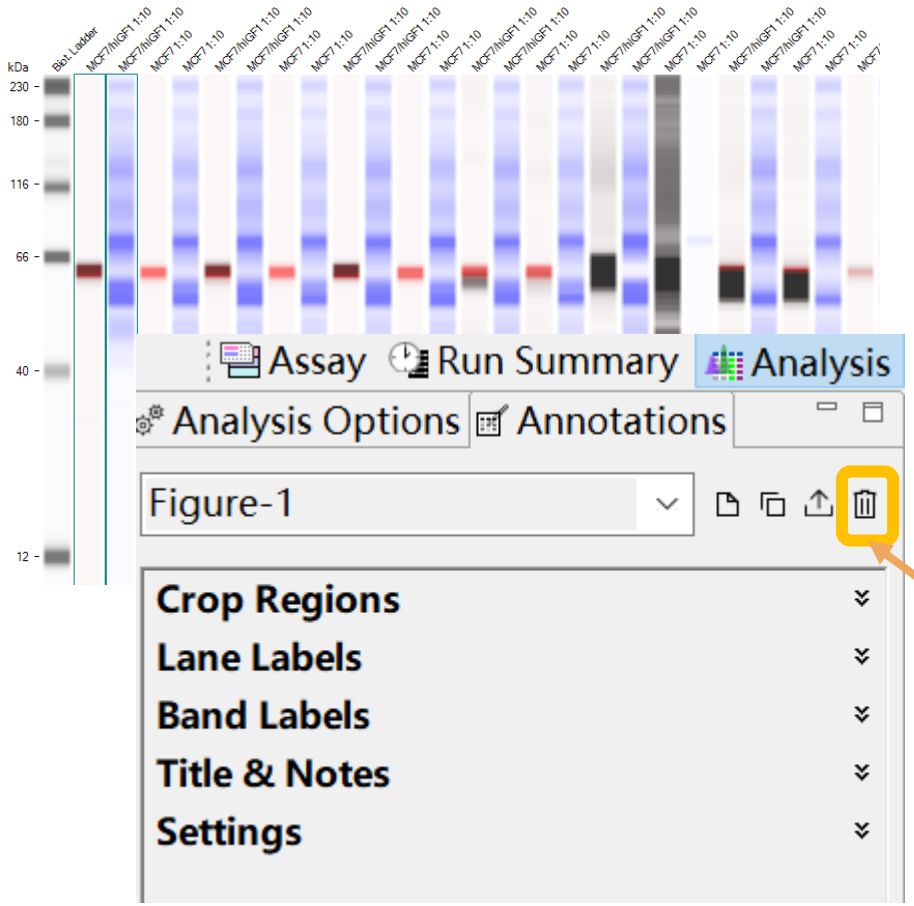


导出注释结果（TIF/PNG/JPG）

LANE 注释

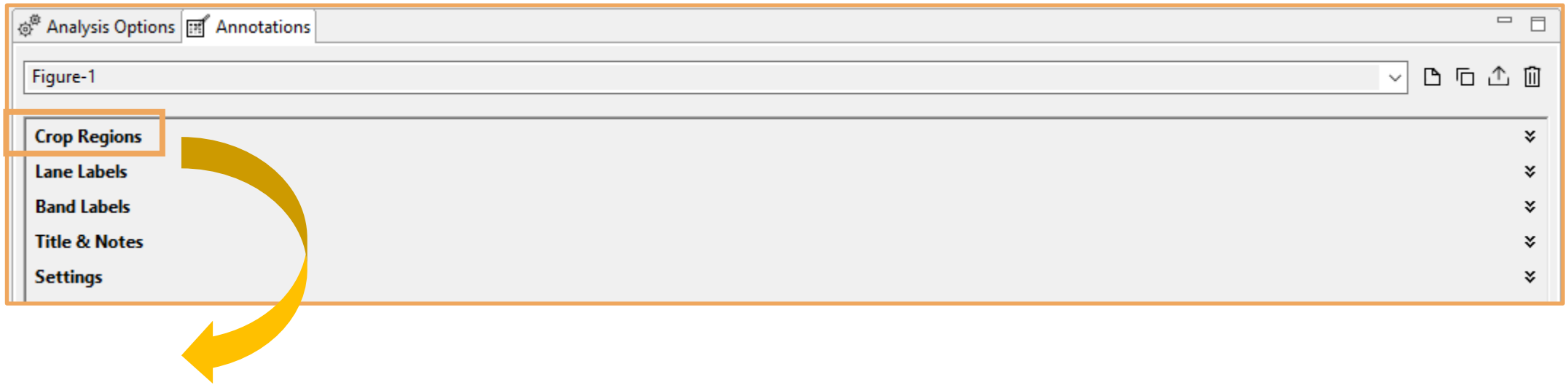
只需在 COMPASS 内即可进行注释



删除该注释结果

LANE 注释 — CROP

只需在 COMPASS 内即可进行注释



LANE 注释 — CROP

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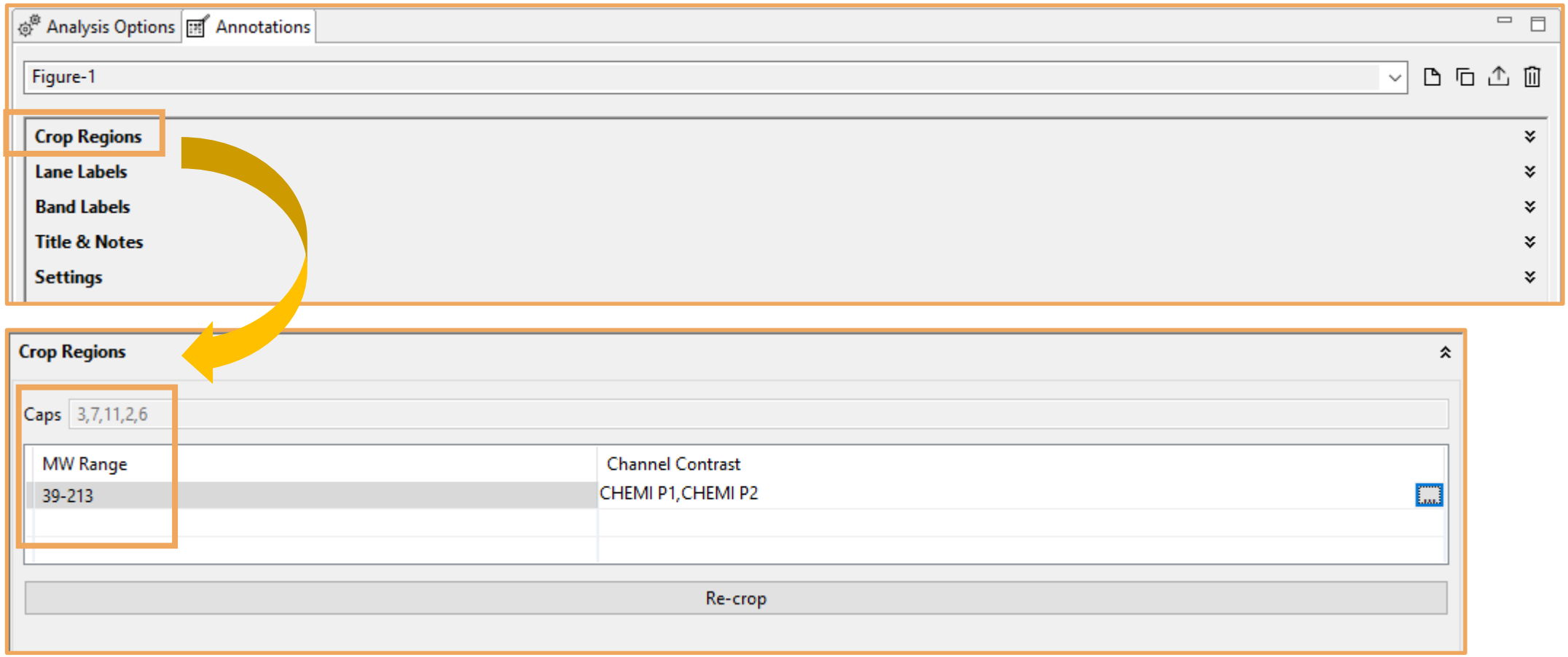

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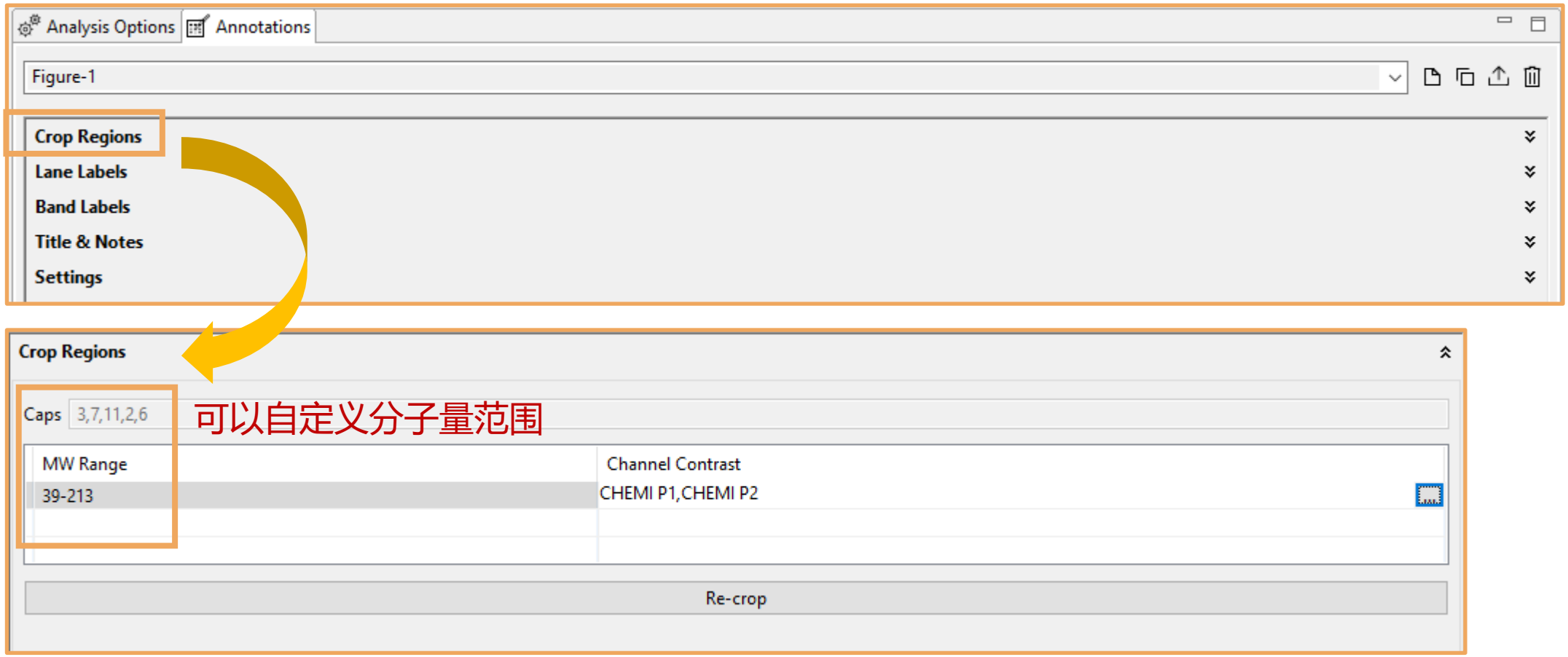

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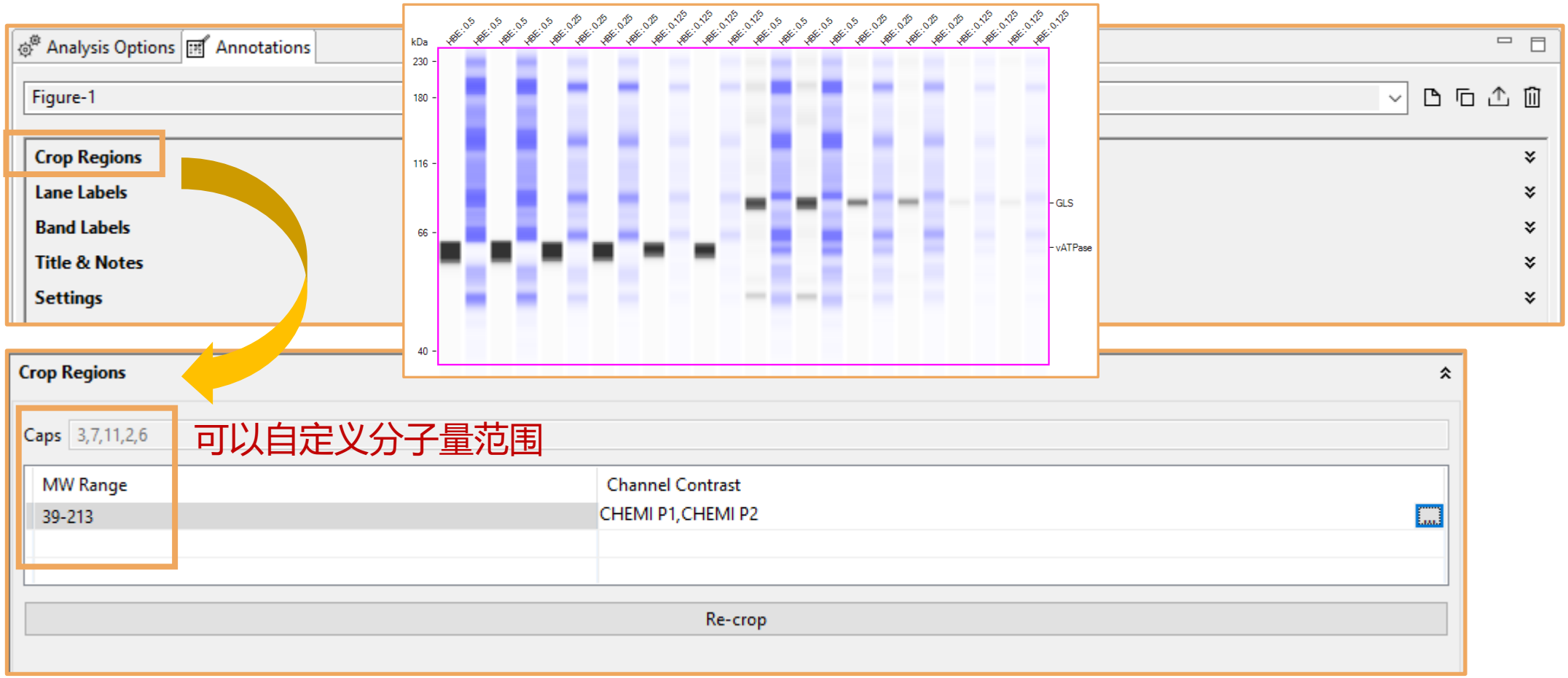

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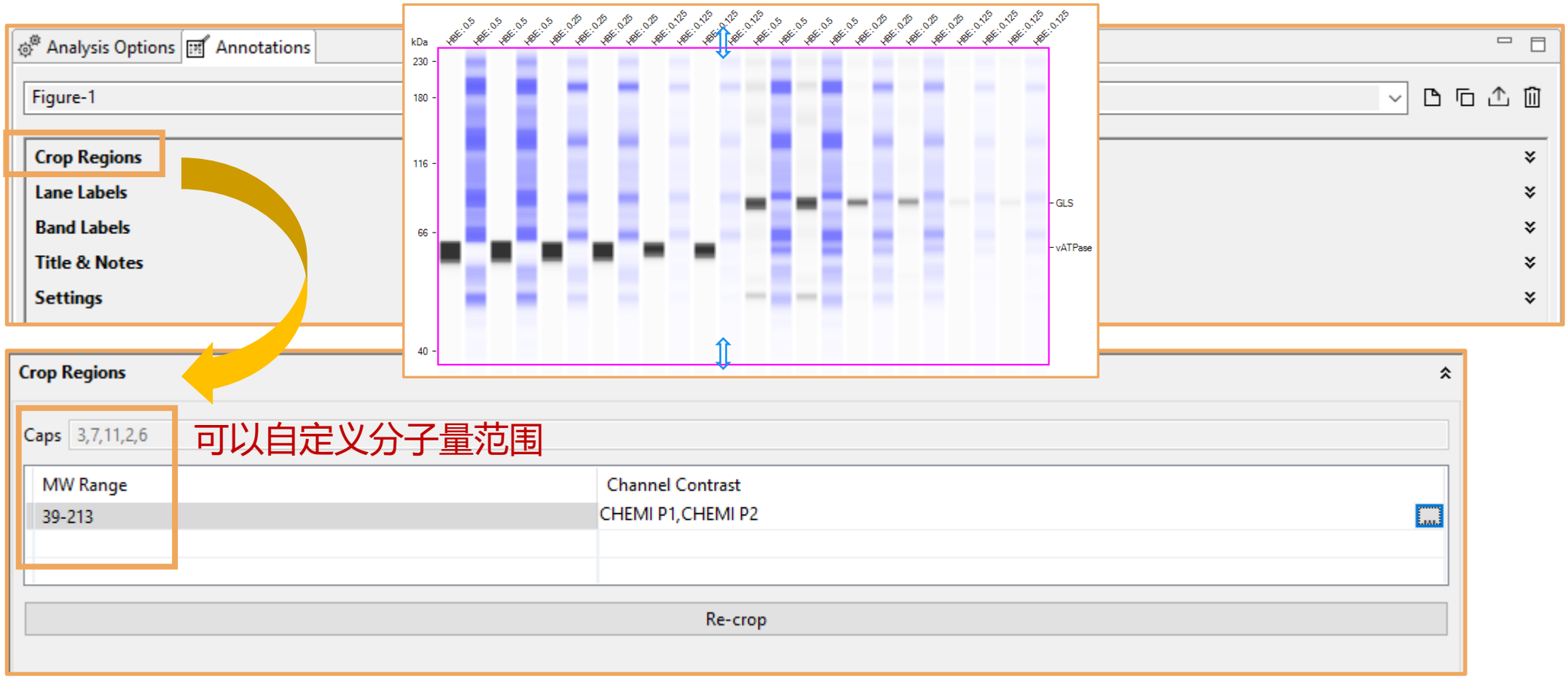

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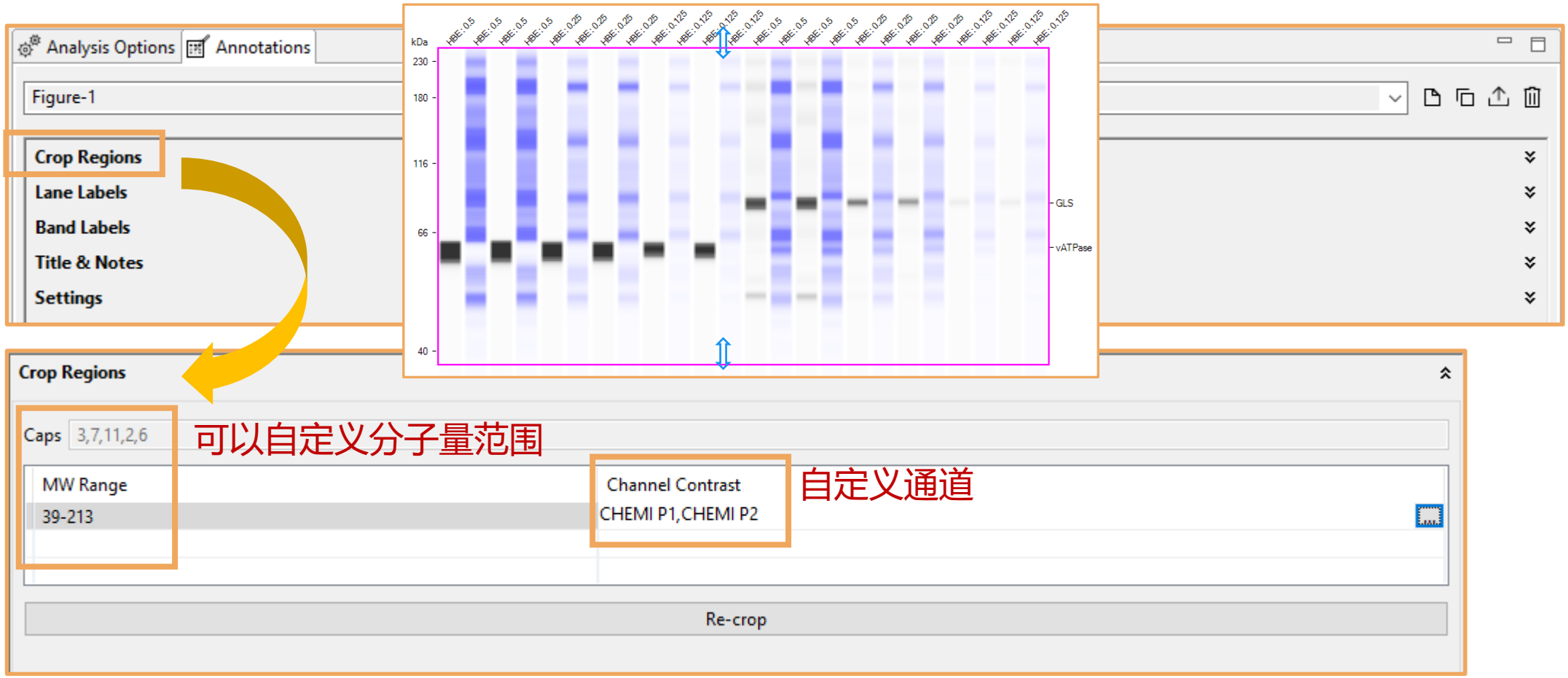
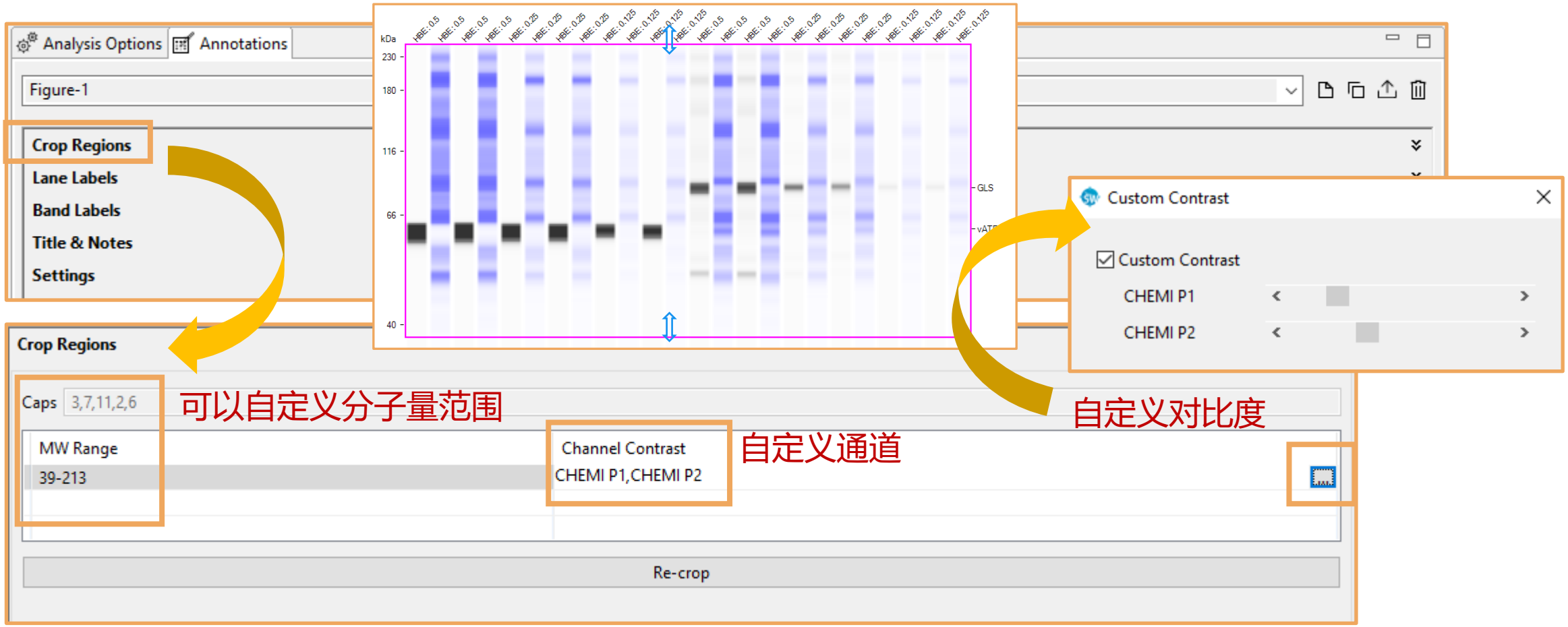


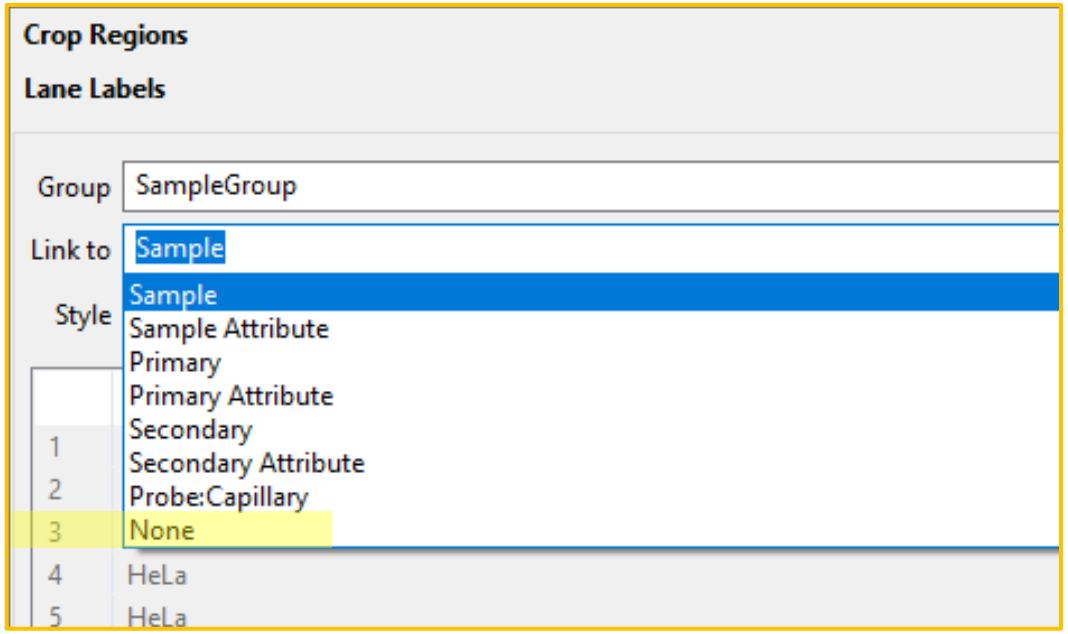
LANE 注释 — CROP

只需在 COMPASS 内即可进行注释



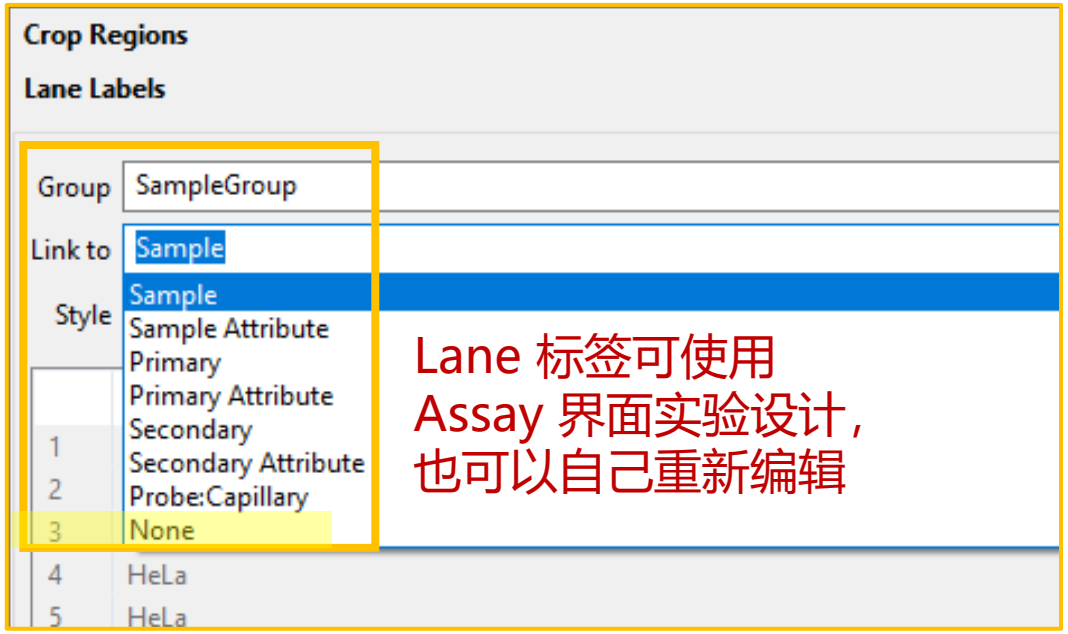
LANE 注释 — LANE LABELS

只需在 COMPASS 内即可进行注释



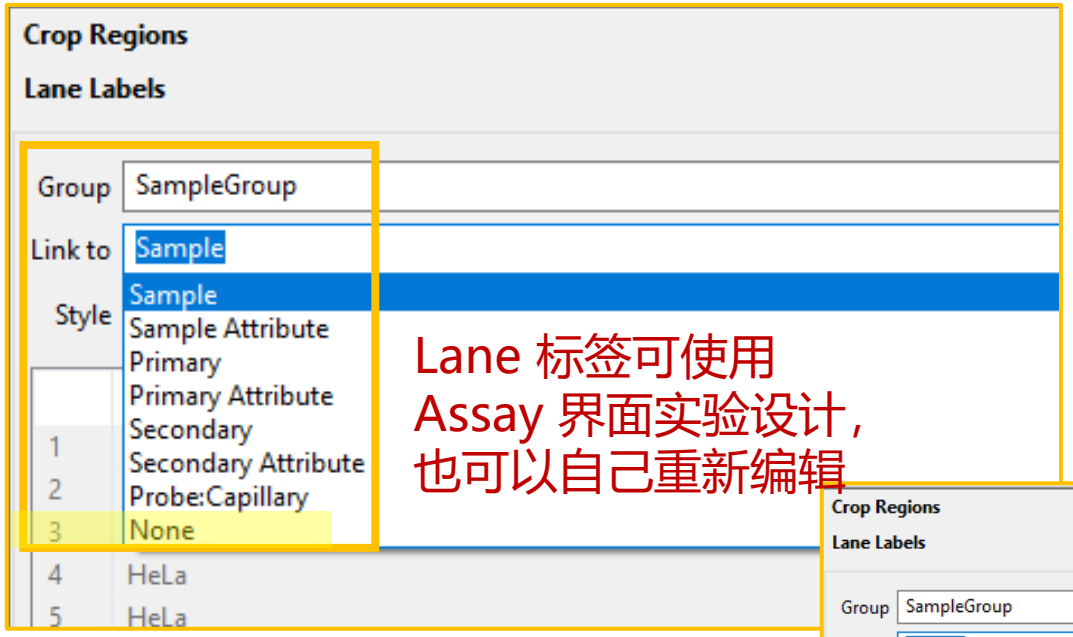
LANE 注释 — LANE LABELS

只需在 COMPASS 内即可进行注释

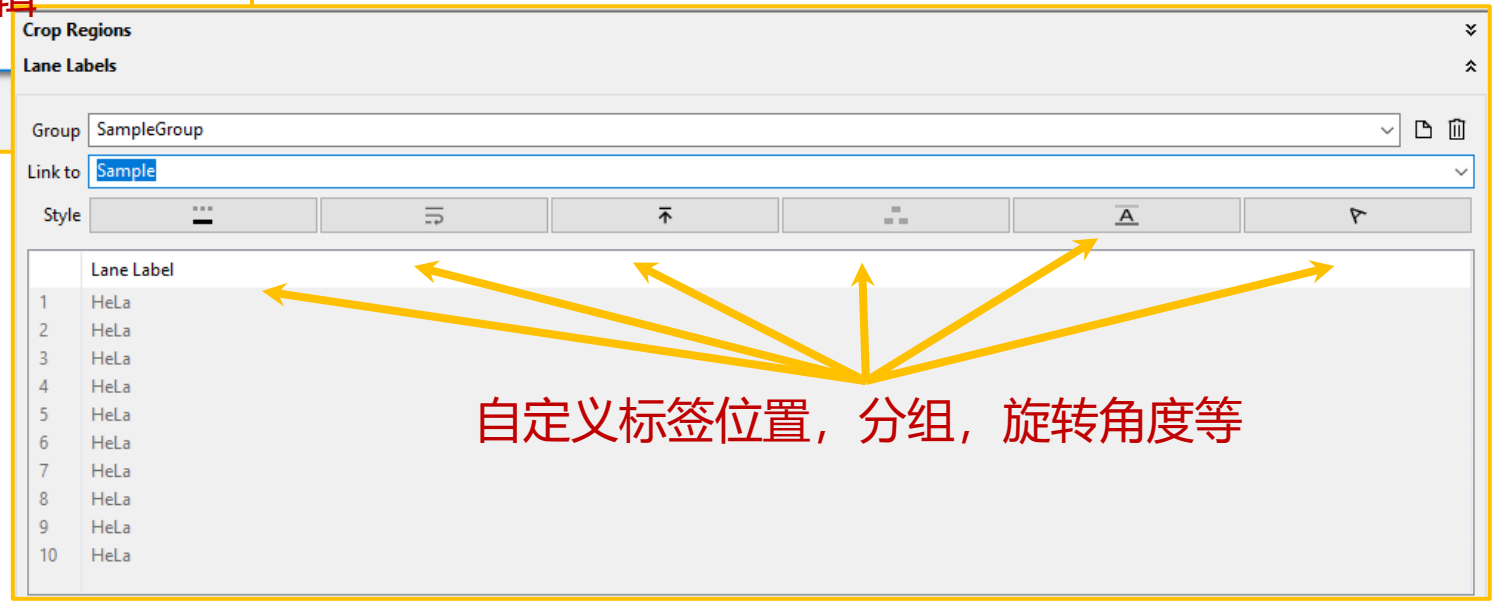


LANE 注释 — LANE LABELS

只需在 COMPASS 内即可进行注释



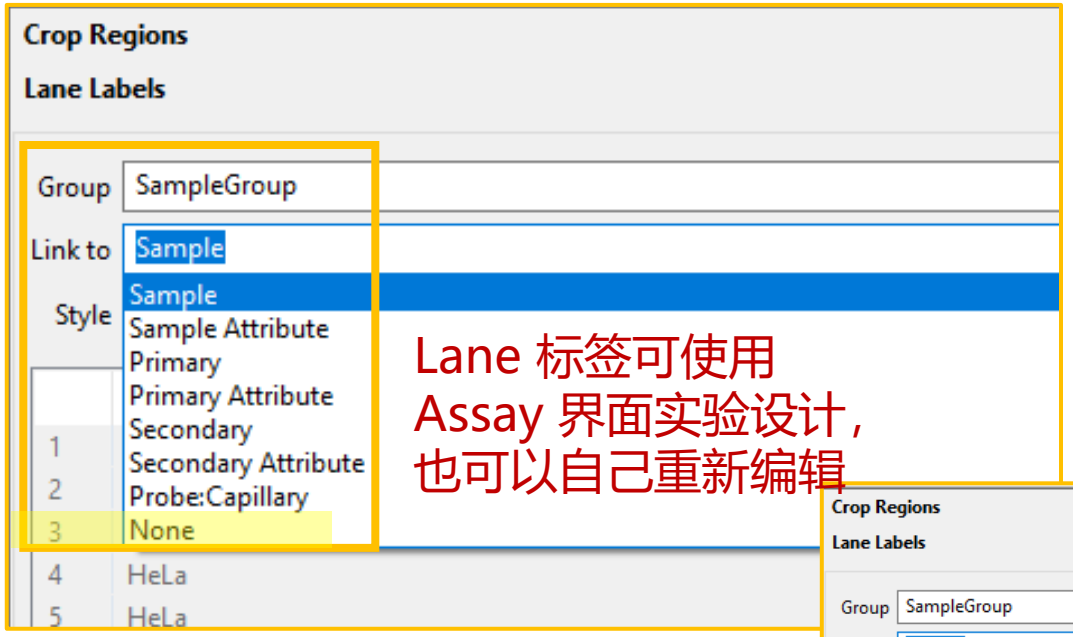
Lane 标签可使用
Assay 界面实验设计，
也可以自己重新编辑



自定义标签位置，分组，旋转角度等

LANE 注释 — LANE LABELS

只需在 COMPASS 内即可进行注释



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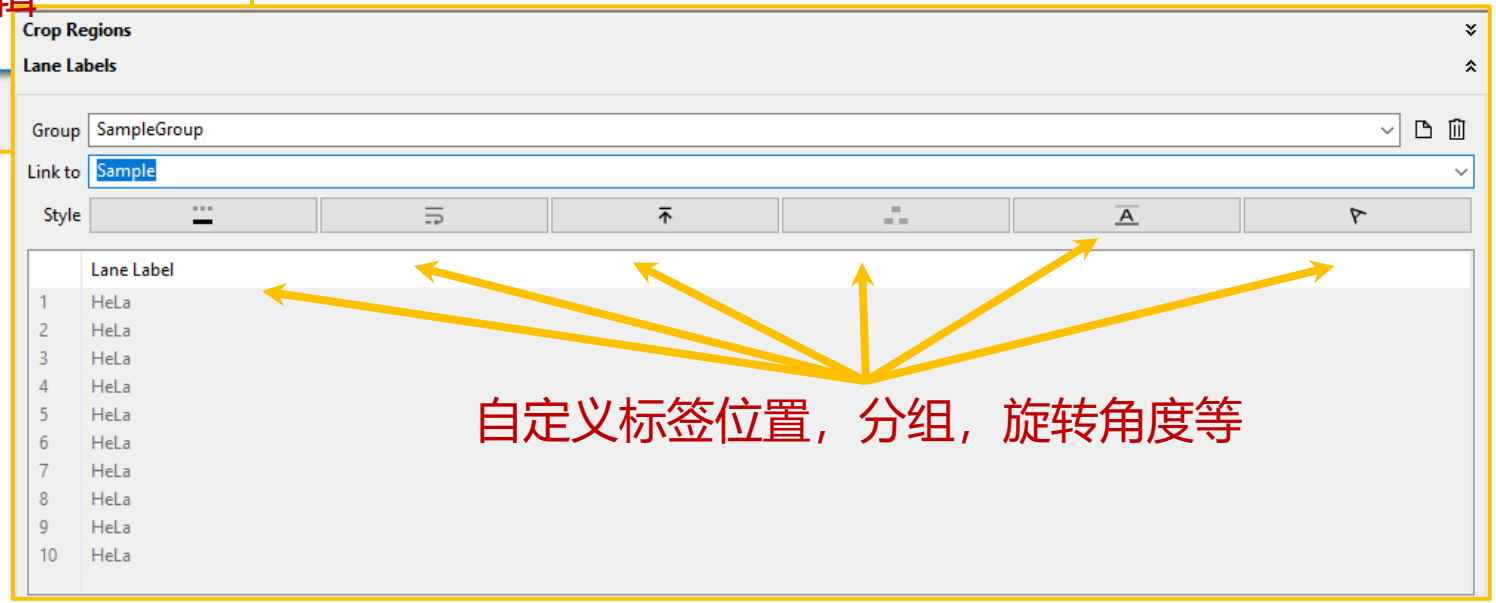

自定义标签位置，分组，旋转角度等

LANE 注释 — LANE LABELS

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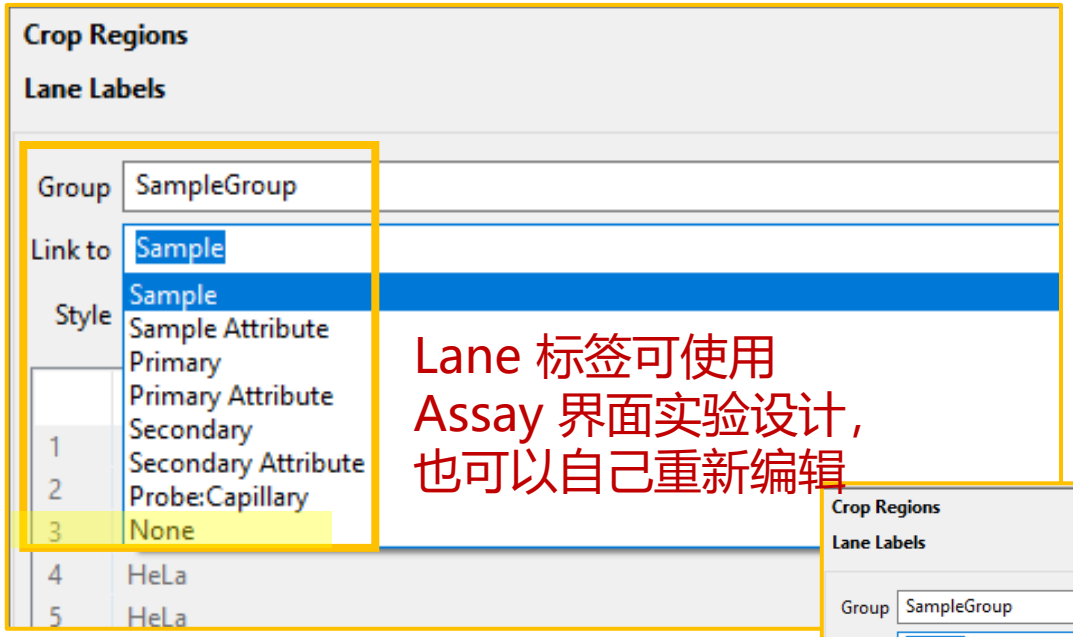

Lane 标签可使用
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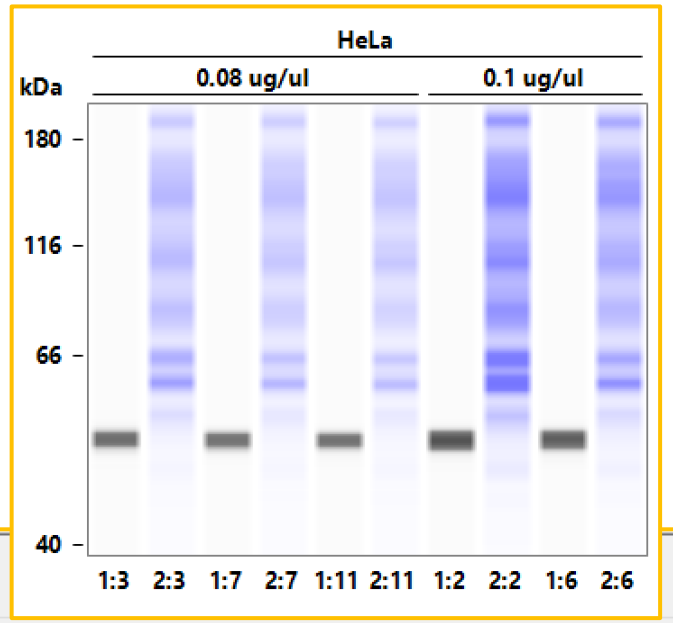
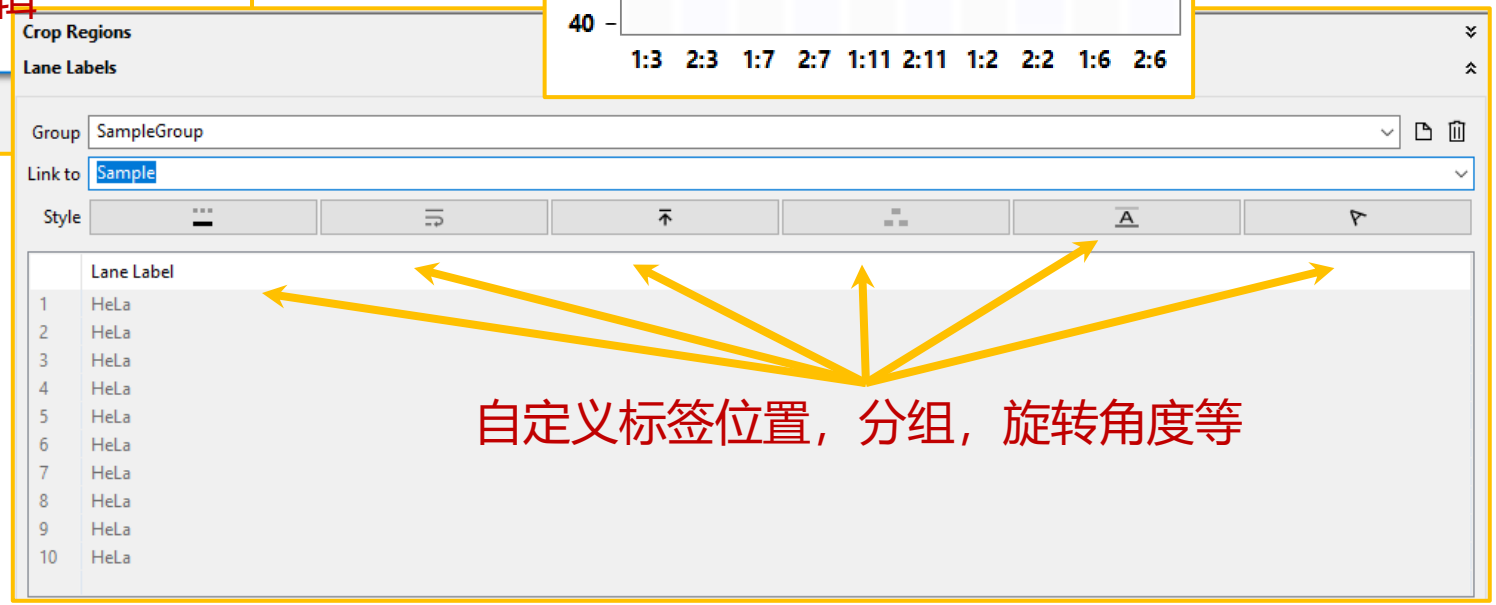




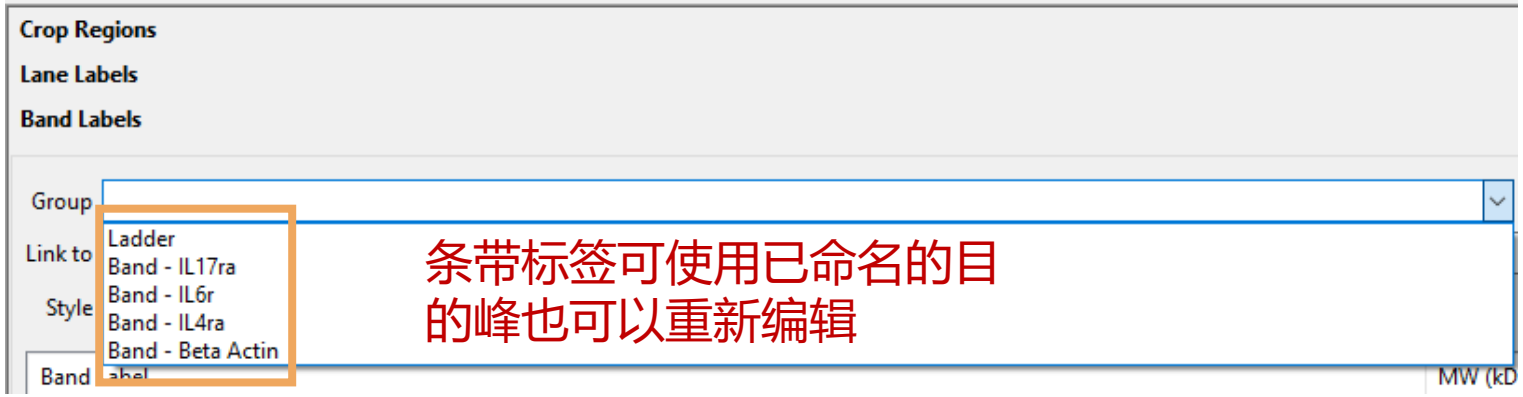
自定义标签位置，分组，旋转角度等

LANE 注释 — BAND LABELS

只需在 COMPASS 内即可进行注释

LANE 注释 — BAND LABELS

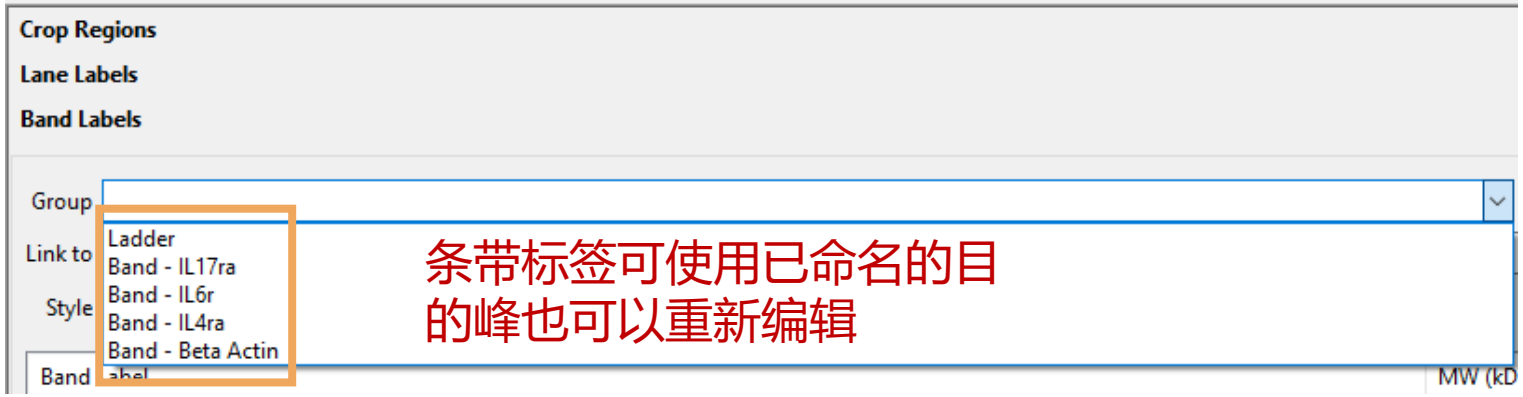
只需在 COMPASS 内即可进行注释

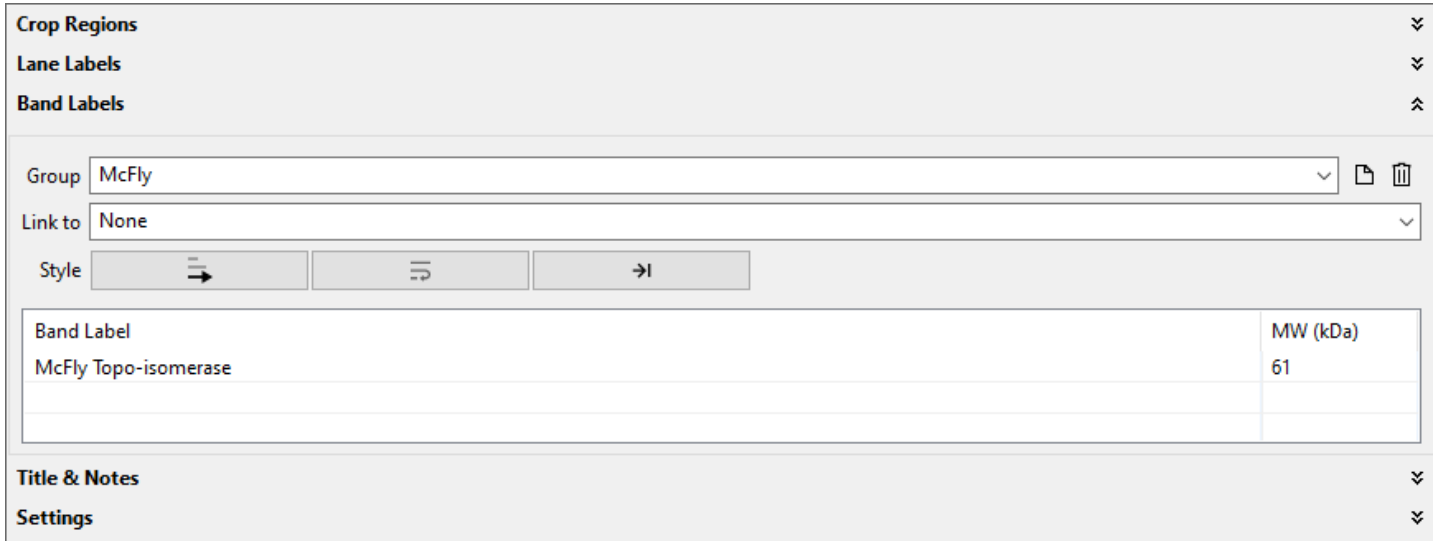


条带标签可使用已命名的目的峰也可以重新编辑

LANE 注释 — BAND LABELS

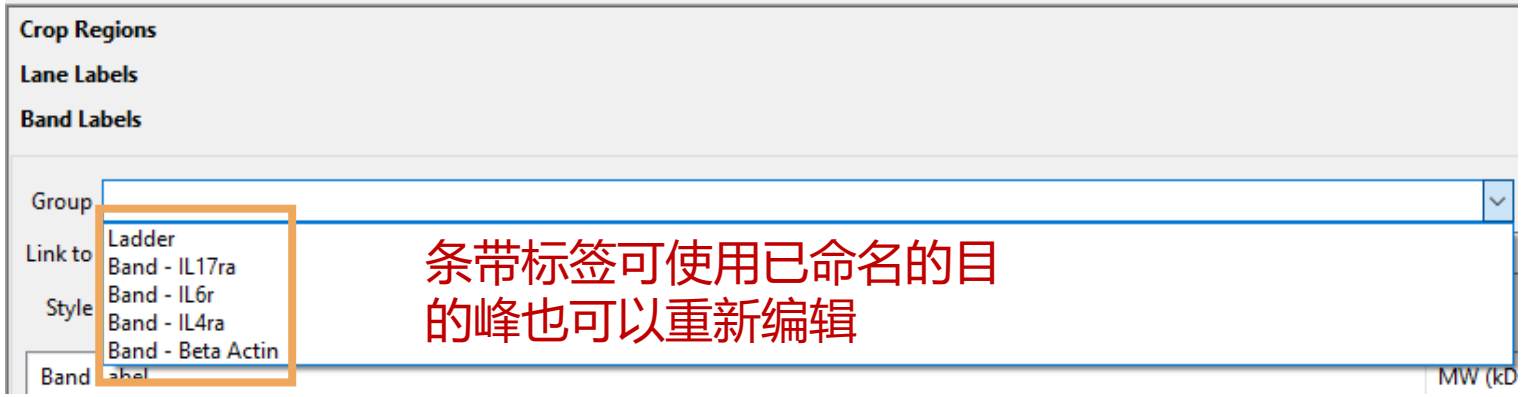
只需在 COMPASS 内即可进行注释





LANE 注释 — BAND LABELS

只需在 COMPASS 内即可进行注释



LANE 注释 — BAND LABELS

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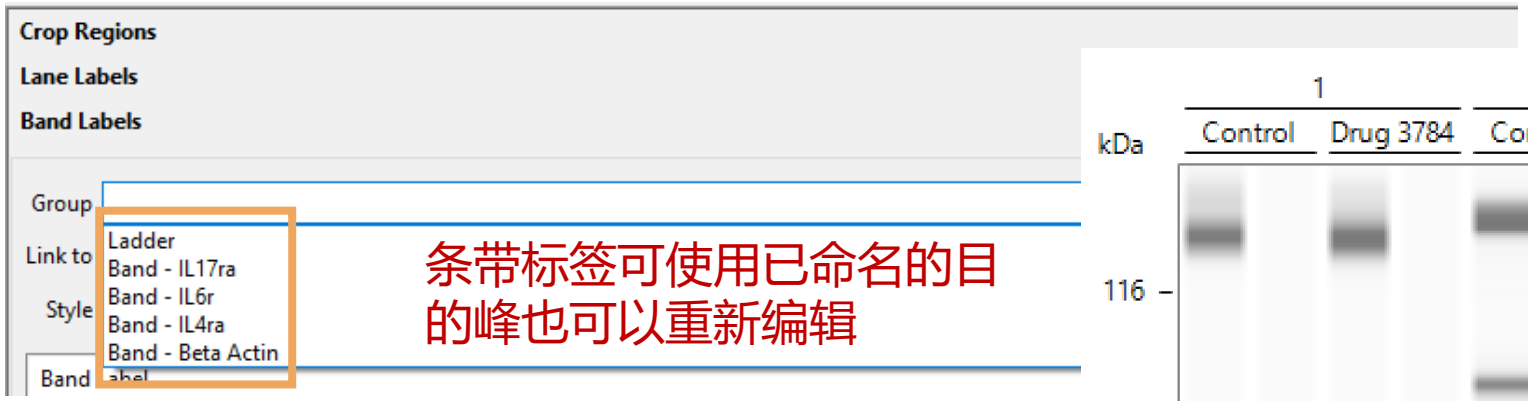
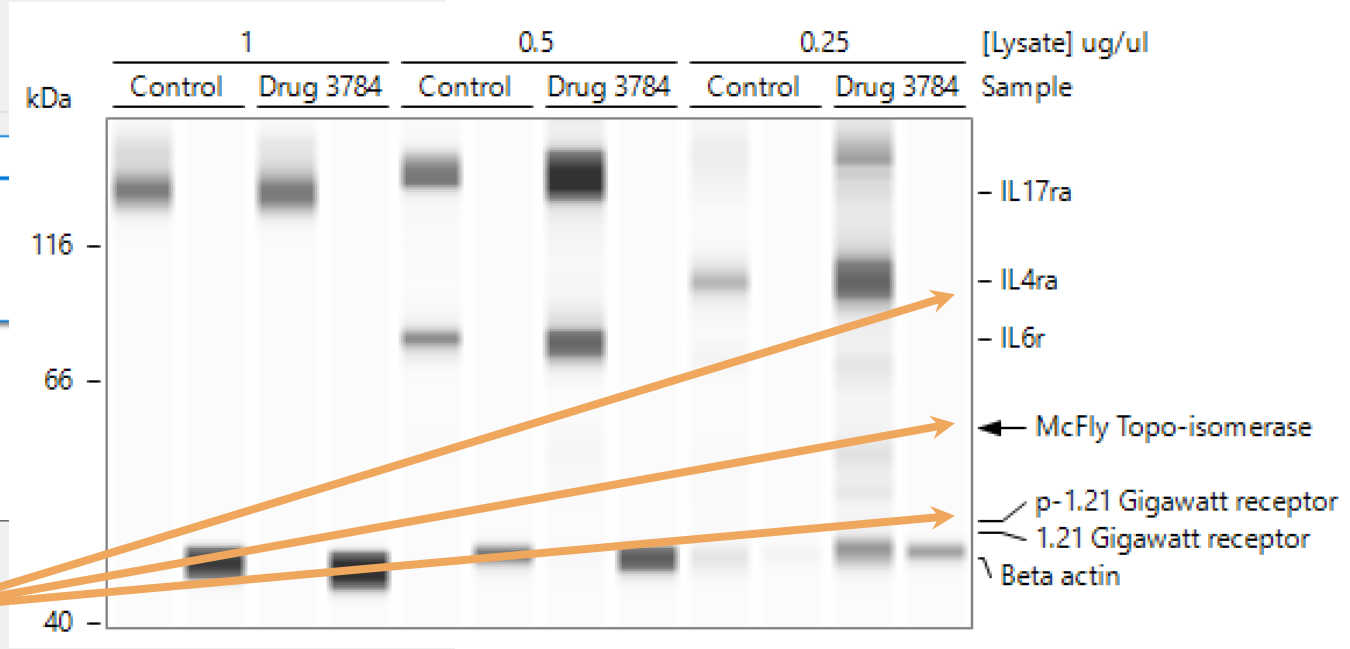


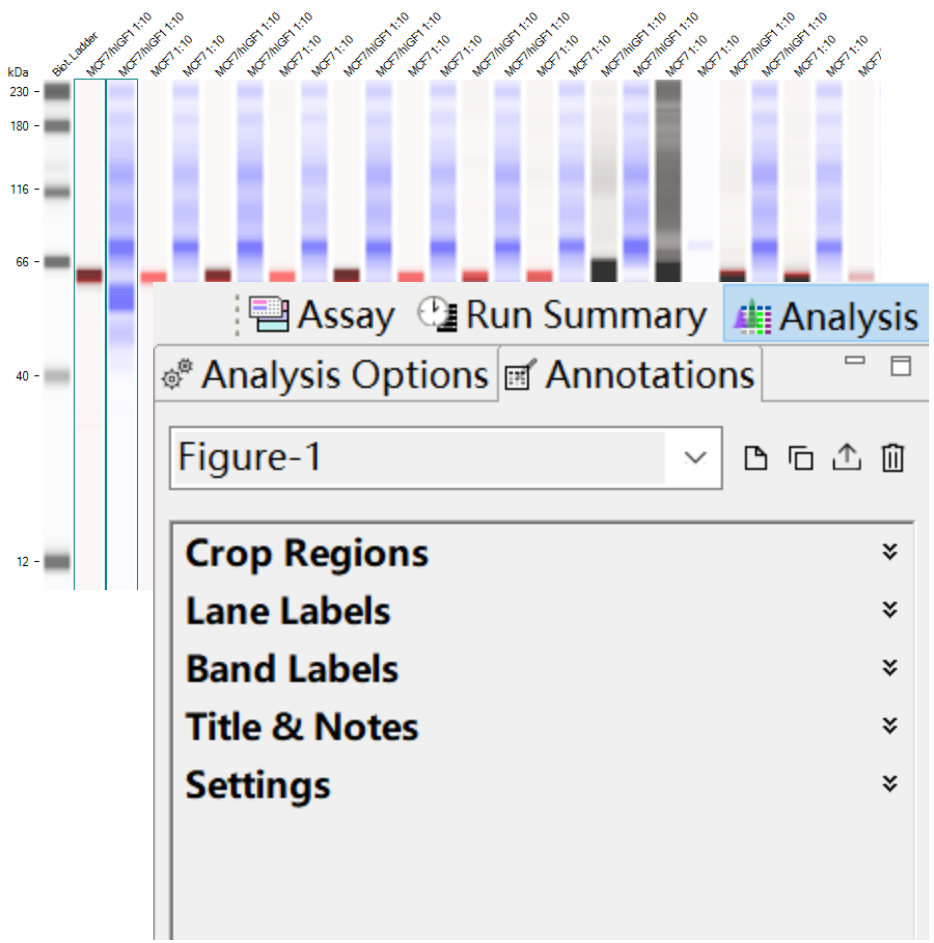
条带标签可使用已命名的目的峰也可以重新编辑



自定义条带位置和展示形式

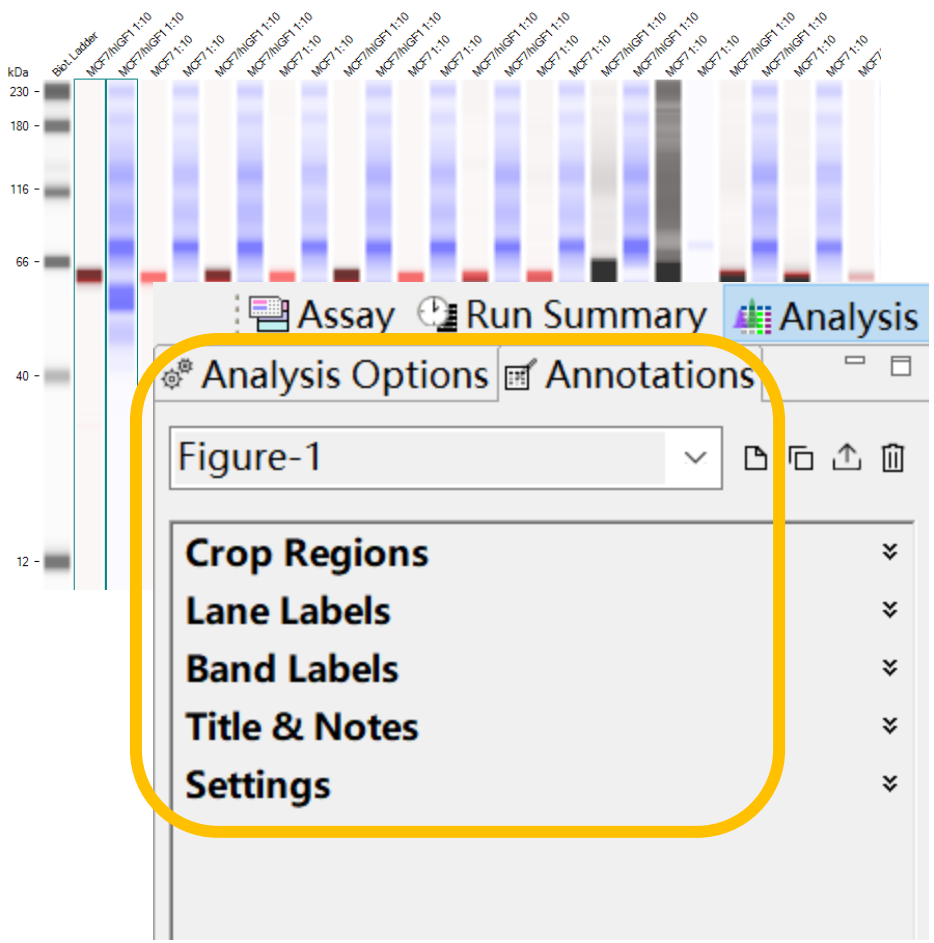
LANE 注释

只需在 COMPASS 内即可进行注释



LANE 注释

只需在 COMPASS 内即可进行注释



LANE 注释

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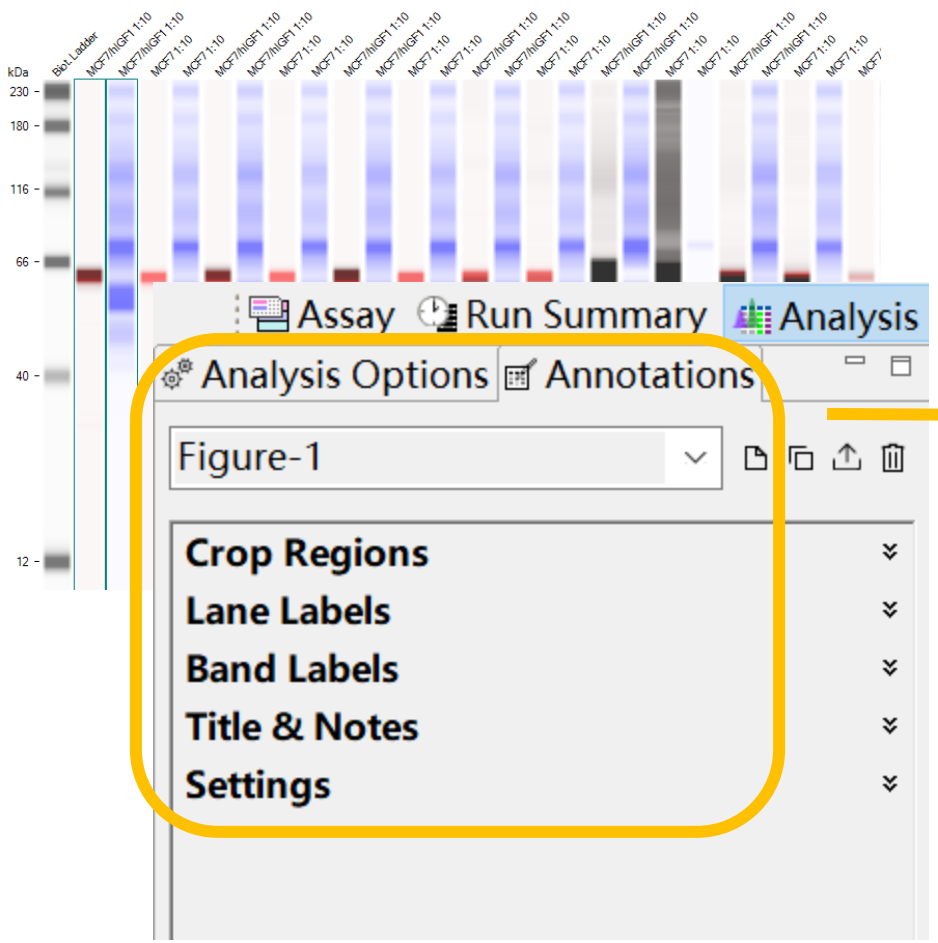

LANE 注释

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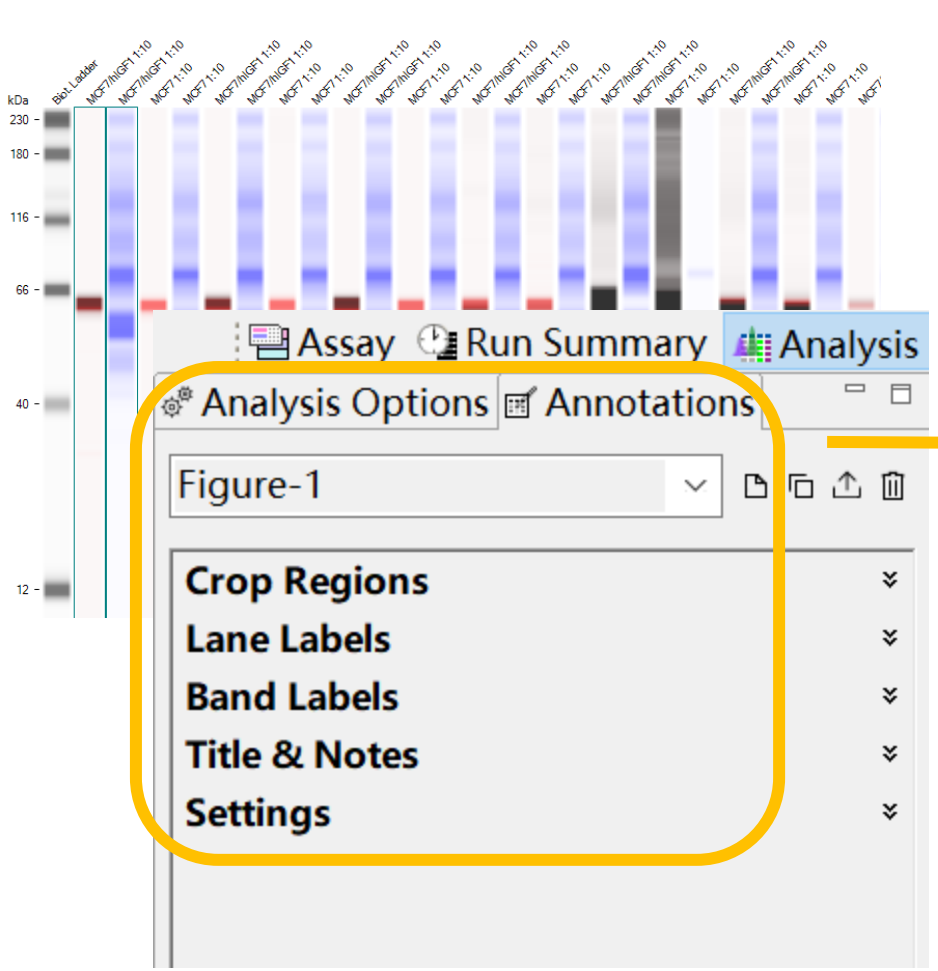
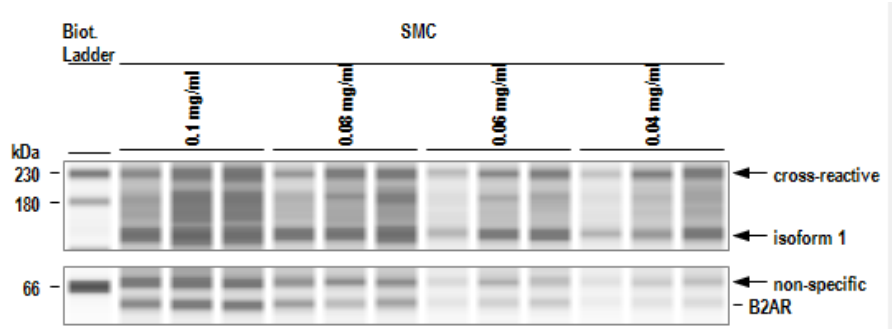
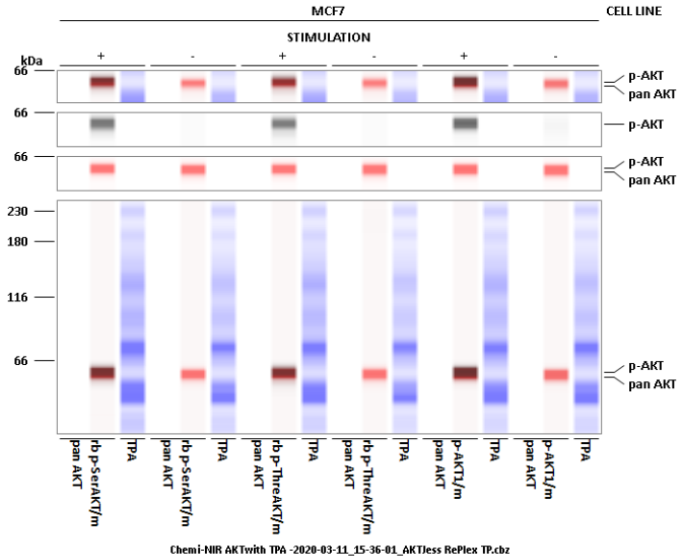
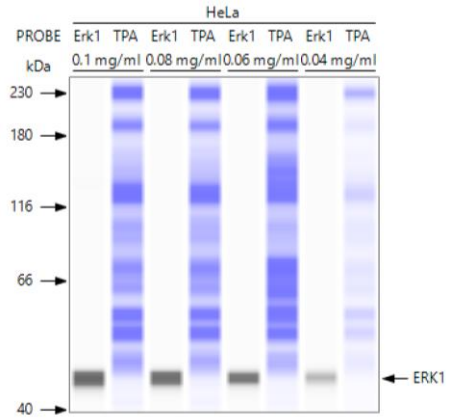




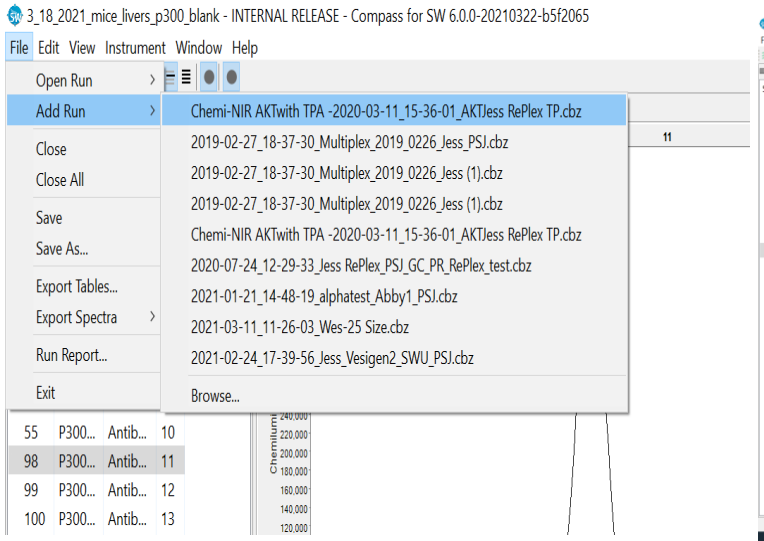


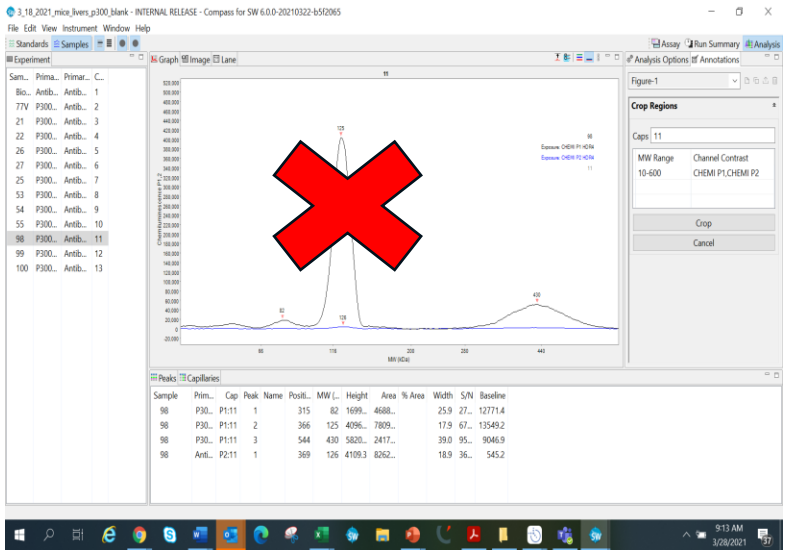


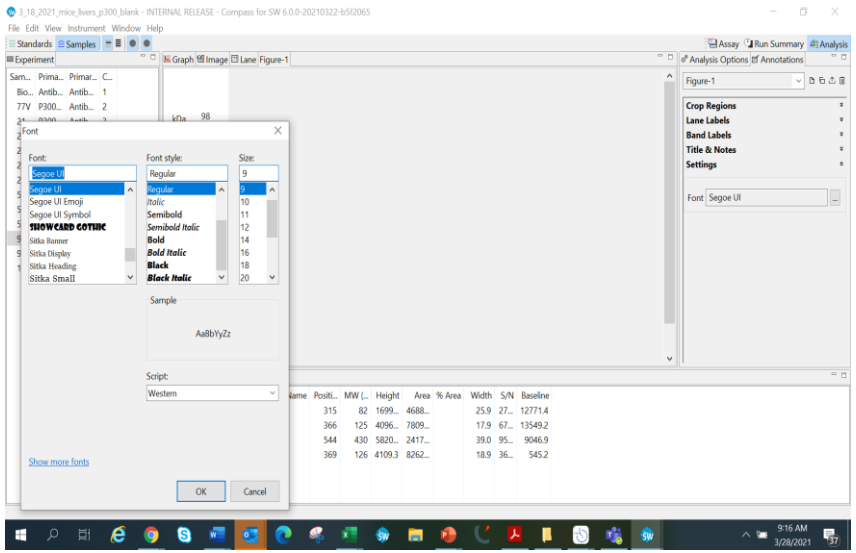
LANE 注释功能目前的局限

只需在 COMPASS 内即可进行注释

- **Add Run** – 同时打开多个运行文件结果不能使用 Lane 注释功能
- **Access Control** – 受管控的运行文件不能使用 Lane 注释功能
- **Graph view** – 不能注释电泳图，只能注释泳道图
- **Fonts** – Lane 工具暂不支持所有类型的字体







导出数据

- **图像拷贝**
  - 在峰形图或者泳道图中，右键点击Copy 复制或保存图像
- **数据拷贝**
  - 选中峰统计表中的行（一行或多行），右键点击 Copy 复制数据
- **点击 File→export tables**
  - 软件将建立一个文件夹导出各类统计数据
- **点击 File→run report**
  - 软件将建立一个 PDF 文档，详细报告图和表

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2021.06.25
活动回顾 | 蛋白质分析技术在转化医学领域的应用技术研讨会 · 成都站
2021年6月25日，Bio-Techne集团（NASDAQ:TECH）旗下ProteinSimple与转化医学网携手，在成都锦江宾馆成功举办了蛋白质分析技术在转化医学领域的应用技术研讨会，50多位专家和学者，共聚蓉城参与此次盛会！
2021年6月29日 17:00
2021太仓国际生物医药创新和产业化峰会
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2021年7月2日 - 4日 太仓市宝龙福朋喜来登酒店
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邀请函 | ProteinSimple邀您共赴2021太仓国 药创新和产业化峰会
4日，ProteinSimple与您相约，太仓 来登酒店，共赴2021太仓国际生物 业化峰会。23号展位，不见不散！
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QUESTIONS