

## BeyoECL Star (特超敏ECL化学发光试剂盒)

产品编号	产品名称	包装
P0018AS	BeyoECL Star (特超敏ECL化学发光试剂盒)	100ml
P0018AM	BeyoECL Star (特超敏ECL化学发光试剂盒)	500ml

### 产品简介:

- 碧云天生产的Western荧光检测试剂BeyoECL Star是一种特超敏ECL化学发光试剂盒, 发光效果显著优于BeyoECL Plus, 可与二抗上偶联的辣根过氧化物酶(horseradish peroxidase, HRP)发生化学反应, 发出荧光, 从而可以通过用X光片压片或其它化学发光成像设备检测样品。
- 碧云天生产的Western荧光检测试剂目前共有三种, 分别是P0018S/P0018M BeyoECL Plus、P0018AS/P0018AM BeyoECL Star和P0018FS/P0018FM BeyoECL Moon。常规的Western检测, 优先推荐使用BeyoECL Star。对于丰度比较高的目的蛋白的检测, 例如内参蛋白等的检测, 推荐使用性价比更高的BeyoECL Plus。对于低丰度较难检测的目的蛋白, 优先推荐使用检测灵敏度最高的BeyoECL Moon。但对于丰度适中的目的蛋白的检测, 不太推荐使用BeyoECL Moon, 因为使用BeyoECL Moon时由于检测灵敏度特别高, 容易产生过曝的现象。
- BeyoECL Star灵敏度极高, 比DAB显色的灵敏度至少高1000倍, 比Amersham公司的ECL或碧云天以前生产的BeyoECL的灵敏度高100-500倍左右, 比碧云天生产的BeyoECL Plus的灵敏度高约5-10倍(参考图1), 比原Pierce公司(现Thermo公司)的SuperSignal West Pico Substrate的灵敏度高10倍以上, 实际检测效果与原Pierce公司的SuperSignal West Dura和SuperSignal West Femto的检测灵敏度相近。对于辣根过氧化物酶的最低检测灵敏度可以达到飞克级, 500飞克辣根过氧化物酶用BeyoECL Star检测并用化学发光仪进行发光强度的定量检测时, 信噪比大于5。

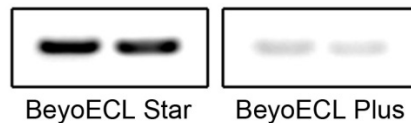


图1. BeyoECL Star和BeyoECL Plus的检测效果对比图。Western检测过程中仅发光试剂不同, 其余完全相同。

- BeyoECL Star的发光时间更长。在10微升1-10纳克/微升辣根过氧化物酶标记IgG中, 加入100微升碧云天的BeyoECL Star工作液后在不同时间点通过化学发光仪(luminometer)检测化学发光。检测数据显示20分钟后发光无明显减弱, 60分钟后发光强度减弱至初始发光强度的约85%左右, 120分钟后发光强度减弱至初始发光强度的约70%左右(参考图2)。

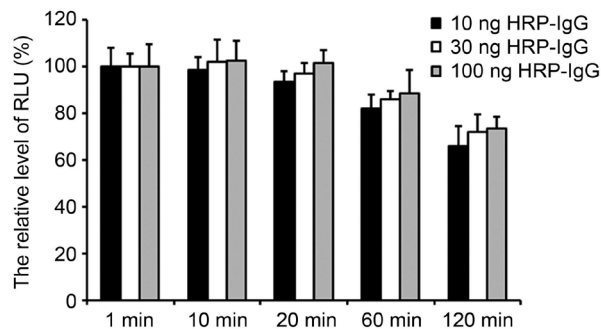


图2. BeyoECL Star检测不同剂量HRP-IgG, 20分钟后发光效果几乎不变, 120分钟后发光效果仍然良好。

- BeyoECL Star的高灵敏度可以大大节省宝贵的样品以及非常昂贵的一抗和二抗的用量。同时必须注意适当减少一抗和二抗或样品的用量, 以免获得过深的难以比较灰度的条带。
- BeyoECL Star非常稳定。BeyoECL Star和BeyoECL Plus一样, 37°C水浴孵育**30天**, 和4°C保存的试剂相比, 对同样样品的检测效果无任何明显差异。
- BeyoECL Star的背景很低, 对PVDF膜和硝酸纤维素膜均适用。PVDF膜(FFP36/FFP39)和硝酸纤维素膜(FFN03)可以向碧云天订购。

### 包装清单:

产品编号	产品名称	包装
P0018AS-1	BeyoECL Star A液	50ml
P0018AS-2	BeyoECL Star B液	50ml
—	说明书	1份

产品编号	产品名称	包装
P0018AM-1	BeyoECL Star A液	250ml
P0018AM-2	BeyoECL Star B液	250ml
—	说明书	1份

#### 保存条件:

4°C避光保存, 一年有效。37°C避光保存, 一个月有效。如果长期不用, 可以-20°C避光保存。-20°C可以保存更长时间。

#### 注意事项:

- BeyoECL Star A液和B液在吸取过程中必须要更换枪头, A液和B液相互污染后会导致A液或B液逐渐失效, 影响后续的使用效果。
- 各溶液使用后, 请盖紧瓶盖, 以防失效。特别是B液, 含有氧化剂, 比较容易被还原而失效。
- BeyoECL Star的荧光持续时间很长, 但开始反应后的20-30分钟内荧光更强一些, 随后荧光会逐渐减弱, 因此请注意充分利用这荧光较强的30分钟进行压片。
- 当发现BeyoECL Star的检测灵敏度过高而影响检测效果时, 可以选择检测灵敏度较低一些的BeyoECL Plus (P0018S/M), 或者减少样品、一抗或二抗的用量。如果BeyoECL Star的检测灵敏度仍然不够时, 可以选择检测灵敏度更高的BeyoECL Moon (P0018FS/M)。
- BeyoECL Star A液和B液均对人体有害, 操作时请小心, 并注意有效防护以避免直接接触人体或吸入体内。
- 本产品仅限于专业人员的科学研究用, 不得用于临床诊断或治疗, 不得用于食品或药品, 不得存放于普通住宅内。
- 为了您的安全和健康, 请穿实验服并戴一次性手套操作。

#### 使用说明:

- Western实验步骤可以参考碧云天的相关网页: <http://www.beyotime.com/support/western.htm>。
- BeyoECL Star工作液的配制:** 等体积混合适量BeyoECL Star A液和B液, 室温放置备用。工作液宜在临检测前配制。
- Western二抗孵育后, 并进行数次洗涤后, 用WB专用镊子(FS035)将膜取出, 用吸水纸略吸去过多的液体(切勿接触膜的蛋白面), 然后置于一洁净保鲜膜上。
- 根据膜的大小, 按每10平方厘米膜加1ml BeyoECL Star工作液的比例, 滴加BeyoECL Star工作液到膜上, 确保使工作液均匀覆盖在膜上, 放置1-2分钟。
- 取膜, 弃BeyoECL Star工作液, 用吸水纸略吸去过多的液体。将膜放在两片保鲜膜中间, 随后进行压片检测或化学发光成像仪检测。
- 压片检测:** 将膜固定于片夹内。暗室内压片1分钟, 立即显影定影, 根据结果再调整压片时间。或直接分别压片30秒、1、3、5分钟, 然后一起显影定影观察结果。
- 化学发光成像仪检测:** 将膜放置到化学发光成像仪内, 参考仪器说明书进行检测。

#### 相关产品:

产品编号	产品名称	包装
P0018S	BeyoECL Plus (超敏ECL化学发光试剂盒)	100ml
P0018M	BeyoECL Plus (超敏ECL化学发光试剂盒)	500ml
P0018AS	BeyoECL Star (特超敏ECL化学发光试剂盒)	100ml
P0018AM	BeyoECL Star (特超敏ECL化学发光试剂盒)	500ml
P0018FS	BeyoECL Moon (极超敏ECL化学发光试剂盒)	100ml
P0018FM	BeyoECL Moon (极超敏ECL化学发光试剂盒)	500ml
P0019	显影定影试剂盒	各1加仑
P0020	显影定影试剂盒	各1升

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