

BeyoECL Moon (极超敏ECL化学发光试剂盒)

产品编号	产品名称	包装
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

产品简介:

- 碧云天生产的Western荧光检测试剂BeyoECL Moon是一种极超敏的以luminol为基础的ECL化学发光试剂盒，发光效果显著优于BeyoECL Star，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光片压片或其它适当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 Moon灵敏度极高，Western blot检测效果与Thermo公司SuperSignal West Dura相当或略佳(参考图1)，化学发光效果在1小时内显著优于Thermo公司的SuperSignal West Dura，30分钟内发光效果可达SuperSignal West Dura的约1.8-3.6倍，BeyoECL Star的4.2-6.9倍(参考图2)。

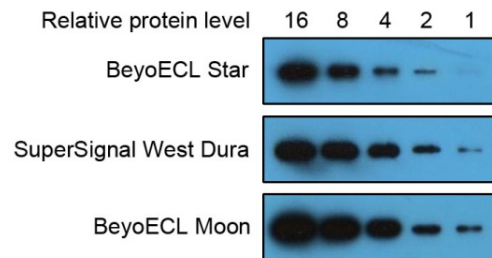


图1. BeyoECL Moon和Thermo公司SuperSignal West Dura及碧云天的BeyoECL Star的Western blot的检测效果对比图。Western检测过程中仅发光试剂不同，其余完全相同。图中可见，碧云天的BeyoECL Star的检测灵敏度大约为SuperSignal West Dura的50%左右，而BeyoECL Moon的检测灵敏度与SuperSignal West Dura相当或略佳。

- BeyoECL Moon的发光强度高。20微升25pg/ μ l辣根过氧化物酶标记IgG中，加入100微升碧云天的BeyoECL Moon工作液等三种不同的发光液后，在不同时间点通过化学发光仪(luminometer)检测化学发光。检测数据显示在1小时内BeyoECL Moon的发光效果总是最强的，BeyoECL Star和SuperSignal West Dura的发光比较稳定，但发光强度要弱不少(图2)。

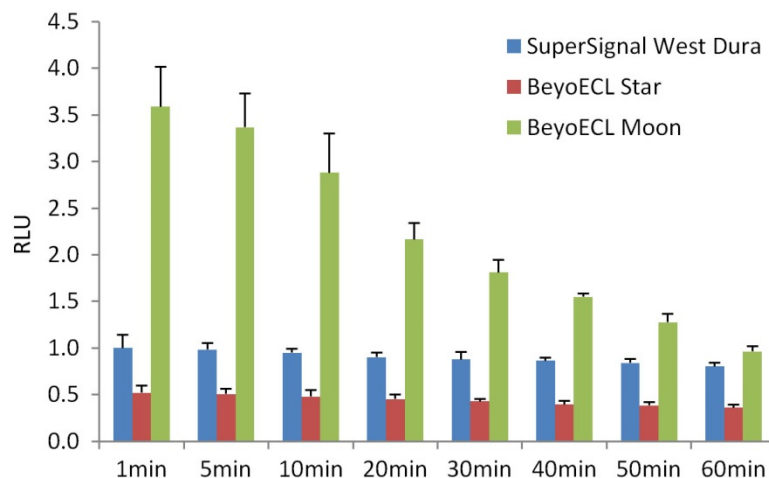


图2. BeyoECL Moon和Thermo公司SuperSignal West Dura以及碧云天的BeyoECL Star的检测效果对比。相同量的HRP-IgG (500pg)，与发光试剂混合后至图中指定时间检测化学发光。图中可见BeyoECL Moon在1小时内发光效果显著优于SuperSignal West Dura和BeyoECL Star。

- BeyoECL Moon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 Moon非常稳定。BeyoECL Moon和BeyoECL Star一样，37°C水浴孵育30天，和4°C保存的试剂相比，对相同样品的检测效果无任何明显差异。
- BeyoECL Moon的背景很低，对PVDF膜和硝酸纤维素膜均适用。PVDF膜(FFP24/FFP26/FFP28/FFP32/FFP33/FFP39)和硝酸纤维素膜(FFN02/FFN03/FFN08)可以向碧云天订购。

包装清单：

产品编号	产品名称	包装
P0018FS-1	BeyoECL Moon A液	50ml
P0018FS-2	BeyoECL Moon B液	50ml
—	说明书	1份

产品编号	产品名称	包装
P0018FM-1	BeyoECL Moon A液	250ml
P0018FM-2	BeyoECL Moon 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，一个月内有效。如果长期不用，可以-20°C避光保存，这样可以保存更长时间。

注意事项：

- BeyoECL Moon 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 Moon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分钟进行压片或成像。
- 当发现BeyoECL Moon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 Star (P0018A)或BeyoECL Plus (P0018)，或者减少样品、一抗或二抗的用量。
- BeyoECL Moon 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：

1. Western实验步骤可以参考碧云天的相关网页：<http://www.beyotime.com/support/western.htm>。
2. BeyoECL Moon工作液的配制：等体积混合适量BeyoECL Moon A液和B液，室温放置备用。工作液宜在临检测前配制。
3. 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。
4. 根据膜的大小，按每10平方厘米膜加1ml BeyoECL Moon工作液的比例，滴加BeyoECL Moon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。
5. 取膜，弃BeyoECL Moon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。
6. 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。
7. 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

使用本产品的文献:

1. Song Y,Zhu JS,Hua R,Du L,Huang ST,Stackman RW Jr,Zhang G,Zhang YM. mall-Conductance Ca²⁺-Activated K⁺ Channel 2 in the Dorsal Horn of Spinal Cord Participates in Visceral Hypersensitivity in Rats. *Front Pharmacol.* 2018 Aug 3;9:840.
2. Cai JY,Xu TT,Wang Y,Chang JJ,Li J,Chen XY,Chen X,Yin YF,Ni XJ. Histone deacetylase HDAC4 promotes the proliferation and invasion of glioma cells. *Int J Oncol.* 2018 Dec;53(6):2758-2768.
3. Lu Y,Liao S,Tu W,Yang B,Liu S,Pei X,Tao D,Lu Y,Ma Y,Yang Y,Liu Y. DNA demethylation facilitates the specific transcription of the mouse X-linked Tsga8 gene in round spermatids. *Biol Reprod.* 2018 Dec 12.
4. Wang Y,Fan L,Cui C,Wang Y,Liang T. EZH2 inhibition promotes methyl jasmonate-induced apoptosis of human colorectal cancer through the Wnt/ β -catenin pathway. *Oncol Lett.* 2018 Jul;16(1):1231-1236.
5. Wang D,Lou X,Jiang XM,Yang C,Liu XL,Zhang N. Quercetin protects against inflammation, MMP-2 activation and apoptosis induction in rat model of cardiopulmonary resuscitation through modulating Bmi-1 expression. *Mol Med Rep.* 2018 Jul;18(1):610-616.
6. Ci Y,Zhang Y,Liu Y,Lu S,Cao J,Li H,Zhang J,Huang Z,Zhu X,Gao J,Han M. Myricetin suppresses breast cancer metastasis through down-regulating the activity of matrix metalloproteinase (MMP)-2/9. *Phytother Res.* 2018 Jul;32(7):1373-1381.
7. Zhang Q,Xin H,Fen T. Function of microRNA-141 in human breast cancer through cytotoxic CD4⁺ T cells regulated by MAP4K4 expression. *Mol Med Rep.* 2018 Jun;17(6):7893-7901.
8. Wang X,Zou P,He Y,Meng K,Quan F,Zhang Y. Effect of luteinizing hormone on goat theca cell apoptosis and steroidogenesis through activation of the PI3K/AKT pathway. *Anim Reprod Sci.* 2018 Mar;190:108-118.
9. Yang YZ,Zhang YF,Yang L,Xu J,Mo XM,Peng W. miR-760 mediates hypoxia-induced proliferation and apoptosis of human pulmonary artery smooth muscle cells via targeting TLR4. *Int J Mol Med.* 2018 Nov;42(5):2437-2446.
10. Yan L,Guo N,Cao Y,Zeng S,Wang J,Lv F,Wang Y,Cao X. miRNA-145 inhibits myocardial infarction-induced apoptosis through autophagy via Akt3/mTOR signaling pathway in vitro and in vivo. *Int J Mol Med.* 2018 Sep;42(3):1537-1547.
11. Xin Y,Li C,Guo Y,Xiao R,Zhang H,Zhou G. RNA-Seq analysis reveals a negative role of MSMO1 with a synergized NSDHL expression during adipogenesis of 3T3-L1. *BIOSCI BIOTECH BIOCH.* 2019 Apr;83(4):641-652.
12. Zhao GS,Zhang Q,Cao Y,Wang Y,Lv YF,Zhang ZS,Zhang Y,Tan QL,Chang Y,Quan ZX,Jiang DM,Guo QN. High expression of ID1 facilitates metastasis in human osteosarcoma by regulating the sensitivity of anoikis via PI3K/AKT depended suppression of the intrinsic apoptotic signaling pathway. *Am J Transl Res.* 2019 Apr 15;11(4):2117-2139.
13. Zhang J,Li H,Yi D,Lai C,Wang H,Zou W,Cao B. Knockdown of vascular cell adhesion molecule 1 impedes transforming growth factor beta 1-mediated proliferation, migration, and invasion of endometriotic cyst stromal cells. *Reprod Biol Endocrinol.* 2019 Aug 23;17(1):69.
14. Gong L,Chang H,Xu H. LncRNA MALAT1 knockdown alleviates oxygen-glucose deprivation and reperfusion induced cardiomyocyte apoptotic death by regulating miR-122. *Exp Mol Pathol.* 2019 Dec;111:104325.
15. Sun H,Sun Y. Lidocaine inhibits proliferation and metastasis of lung cancer cell via regulation of miR-539/EGFR axis. *Artif Cells Nanomed Biotechnol.* 2019 Dec;47(1):2866-2874.
16. Wang W,Hao Y,Li F. Notoginsenoside R1 alleviates high glucose-evoked damage in RSC96 cells through down-regulation of miR-503. *Artif Cells Nanomed Biotechnol.* 2019 Dec;47(1):3947-3954.
17. Luo J,Pan J,Jin Y,Li M,Chen M. MiR-195-5p Inhibits Proliferation and Induces Apoptosis of Non-Small Cell Lung Cancer Cells by Targeting CEP55. *Onco Targets Ther.* 2019 Dec 24;12:11465-11474.
18. Gao Z,Zhao GS,Lv Y,Peng D,Tang X,Song H,Guo QN. Anoikis-resistant human osteosarcoma cells display significant angiogenesis by activating the Src kinase-mediated MAPK pathway. *Oncol Rep.* 2019 Jan;41(1):235-245.
19. Sang Y,Zhang R,Sun L,Chen KK,Li SW,Xiong L,Peng Y,Zeng L,Huang G. MORF4L1 suppresses cell proliferation, migration and invasion by increasing p21 and E-cadherin expression in nasopharyngeal carcinoma. *Oncol Lett.* 2019 Jan;17(1):294-302.
20. Wang X,Meng K,He Y,Wang H,Zhang Y,Quan F. Melatonin Stimulates STAR Expression and Progesterone Production via Activation of the PI3K/AKT Pathway in Bovine Theca Cells. *Int J Biol Sci.* 2019 Jan 1;15(2):404-415.
21. Xiao R,Li C,Wang C,Cao Y,Zhang L,Guo Y,Xin Y,Zhang H,Zhou G. Adipogenesis associated Mth938 domain containing (AAMDC) protein expression is regulated by alternative polyadenylation and microRNAs. *FEBS Lett.* 2019 Jul;593(14):1724-1734.
22. Liu X,Chu Y,Wang D,Weng Y,Jia Z. MAPK-mediated upregulation of fibrinogen-like protein 2 promotes proliferation, migration, and invasion of colorectal cancer cells. *Cell Biol Int.* 2019 Jul 9;
23. Jiang J,Li Y,Jiang Z. Effects of LDOC1 on colorectal cancer cells via downregulation of the Wnt/ β -catenin signaling pathway. *Oncol Rep.* 2019 Jun;41(6):3281-3291.
24. Li Y,Niu S,Xi D,Zhao S,Sun J,Jiang Y,Liu J. Differences in Lipopolysaccharides-Induced Inflammatory Response Between Mouse Embryonic Fibroblasts and Bone Marrow-Derived Macrophages. *J Interferon Cytokine Res.* 2019 Jun;39(6):375-382.
25. Ouyang X,Zhu Z,Yang C,Wang L,Ding G,Jiang F. Epinephrine increases malignancy of breast cancer through p38 MAPK signaling pathway in depressive disorders. *Int J Clin Exp Pathol.* 2019 Jun 1;12(6):1932-1946.
26. Zhang K,Zhang Q,Deng J,Li J,Li J,Wen L,Ma J,Li C. ALK5 signaling pathway mediates neurogenesis and functional recovery after cerebral ischemia/reperfusion in rats via Gadd45b. *Cell Death Dis.* 2019 May 1;10(5):360.
27. Shan W,Cheng C,Huang W,Ding Z,Luo S,Cui G,Lu W,Liu F,Xu J,He W,Yin Z. Angiopoietin-like 2 upregulation promotes human chondrocyte injury via NF- κ B and p38/MAPK signaling pathway. *J Bone Miner Metab.* 2019 Nov;37(6):976-986.
28. Xi J,Luo X,Wang Y,Li J,Guo L,Wu G,Li Q. Tetrahydrocurcumin protects against spinal cord injury and inhibits the oxidative stress response by regulating FOXO4 in model rats. *Exp Ther Med.* 2019 Nov;18(5):3681-7.
29. Li S,Zhang S,Chen J. c-Myc induced upregulation of long non-coding RNA SNHG16 enhances progression and carcinogenesis in oral squamous cell carcinoma. *Cancer Gene Ther.* 2019 Nov;26(11-12):400-10.
30. Li Y,Jin S,Zhao X,Luo H,Li R,Li D,Xiao T. Sequence and expression analysis of the cytoplasmic pattern recognition receptor melanoma differentiation-associated gene 5 from the barbel chub *Squaliobarbus curriculus*. *Fish Shellfish Immunol.* 2019 Nov;94:485-496.
31. Du Y,Qian B,Gao L,Tan P,Chen H,Wang A,Zheng T,Pu S,Xia X,Fu W. Aloin Preconditioning Attenuates Hepatic Ischemia/Reperfusion Injury via Inhibiting TLR4/MyD88/NF- κ B Signal Pathway In Vivo and In Vitro. *Oxid Med Cell Longev.* 2019 Nov 20;2019:3765898.
32. Yang Y,Li S,Cao J,Li Y,Hu H,Wu Z. RRM2 Regulated By LINC00667/miR-143-3p Signal Is Responsible For Non-Small Cell Lung Cancer Cell Progression. *Onco Targets Ther.* 2019 Nov 20;12:9927-9939.
33. Liu Z,Yu Z,Chang H,Wang Y,Xiang H,Zhang X,Yu B. Strontium-containing α -calcium sulfate hemihydrate promotes bone repair via the TGF- β /Smad signaling pathway. *Mol Med Rep.* 2019 Oct;20(4):3555-3564.
34. Lou K,Huang P,Ma H,Wang X,Xu H,Wang W. Orlistat increases arsenite tolerance in THP-1 derived macrophages through the up-regulation of ABCA1. *Drug Chem Toxicol.* 2019 Oct 31:1-9;
35. Zhou Z,Zhou X,Dong Y,Li M,Xu Y. Formononetin ameliorates high glucose-induced endothelial dysfunction by inhibiting the JAK/STAT signaling pathway. *Mol Med Rep.* 2019 Sep;20(3):2893-2901.
36. Ji X,Wei X,Qian J,Mo X,Kai G,An F,Lu Y. 2',4'-Dihydroxy-6'-methoxy-3',5'-dimethylchalcone induced apoptosis and G1 cell cycle arrest through PI3K/AKT pathway in BEL-7402/5-FU cells. *Food Chem Toxicol.* 2019 Sep;131:110533.
37. Yang X,Zhang C,Tie H,Luo J,Wang Y,Wu Q. miR-760 exerts an antioncogenic effect in esophageal squamous cell carcinoma by negatively driving fat metabolism via targeting c-Myc. *J Cell Biochem.* 2020 Apr;121(4):2950-2961.

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