



碧云天生物技术/Beyotime Biotechnology  
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## SDS-PAGE凝胶配制试剂盒

产品编号	产品名称	包装
P0012A	SDS-PAGE 凝胶配制试剂盒	可制30-50块胶

### 产品简介:

- 碧云天生产的SDS-PAGE凝胶配制试剂盒提供了配制SDS-PAGE凝胶所需的各种试剂, 用户只需自备制胶器具和蒸馏水, 即可配制PAGE胶(即聚丙烯酰胺凝胶)。
- SDS-PAGE凝胶配制试剂盒不仅可用于配制SDS-PAGE凝胶, 也可用于配制非变性(native)PAGE凝胶。
- 本试剂盒约可配制30-50块常规大小的PAGE胶。

### 包装清单:

产品编号	产品名称	包装
P0012A-1	30% Acr-Bis (29:1)	100ml
P0012A-2	1M Tris-HCl, pH8.8	100ml
P0012A-3	10% SDS	5ml
P0012A-4	Ammonium persulfate (过硫酸铵)	0.5g
P0012A-5	TEMED	0.5ml
P0012A-6	1M Tris-HCl, pH6.8	15ml
—	说明书	1份

### 保存条件:

1M Tris-HCl, pH8.8、10% SDS、Ammonium persulfate (过硫酸铵)和1M Tris-HCl, pH6.8室温保存。30% Acr-Bis (29:1)和TEMED 4°C避光保存。过硫酸铵配制成10%溶液后, 分装成小管-20°C保存, 通常半年内有效。

### 注意事项:

- 过硫酸铵配制成10%溶液后, 应当-20°C保存。同时应尽量减少室温存放时间, 以防失效。
- TEMED易挥发, 使用后请盖紧瓶盖。另外凝胶凝聚的速度和温度及光照关系密切, 可通过适当调节TEMED的用量, 控制在不同的室内环境下凝胶凝聚的速度。
- TEMED易燃, 有腐蚀性, 请注意防护。
- 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. 根据目的蛋白的分子量大小选择合适的凝胶浓度, 再按照下面的表格配制SDS-PAGE的分离胶(即下层胶):  
不同浓度的SDS-PAGE分离胶的最佳分离范围:

SDS-PAGE分离胶浓度	最佳分离范围
6%胶	50-150kD
8%胶	30-90kD
10%胶	20-80kD
12%胶	12-60kD
15%胶	10-40kD

成分	配制不同体积SDS-PAGE分离胶所需各成分的体积(毫升)					
6%胶	5	10	15	20	30	50
蒸馏水	2.0	4.0	6.0	8.0	12.0	20.0
30% Acr-Bis(29:1)	1.0	2.0	3.0	4.0	6.0	10.0
1M Tris, pH8.8	1.9	3.8	5.7	7.6	11.4	19.0
10% SDS	0.05	0.1	0.15	0.2	0.3	0.5
10%过硫酸铵	0.05	0.1	0.15	0.2	0.3	0.5

TEMED	0.004	0.008	0.012	0.016	0.024	0.04
成分	配制不同体积SDS-PAGE分离胶所需各成分的体积(毫升)					
8%胶	5	10	15	20	30	50
蒸馏水	1.7	3.3	5	6.7	10.0	16.7
30% Acr-Bis(29:1)	1.3	2.7	4.0	5.3	8.0	13.3
1M Tris, pH8.8	1.9	3.8	5.7	7.6	11.4	19.0
10% SDS	0.05	0.1	0.15	0.2	0.3	0.5
10%过硫酸铵	0.05	0.1	0.15	0.2	0.3	0.5
TEMED	0.003	0.006	0.009	0.012	0.018	0.03
成分	配制不同体积SDS-PAGE分离胶所需各成分的体积(毫升)					
10%胶	5	10	15	20	30	50
蒸馏水	1.3	2.7	4.0	5.3	8.0	13.3
30% Acr-Bis(29:1)	1.7	3.3	5.0	6.7	10.0	16.7
1M Tris, pH8.8	1.9	3.8	5.7	7.6	11.4	19.0
10% SDS	0.05	0.1	0.15	0.2	0.3	0.5
10%过硫酸铵	0.05	0.1	0.15	0.2	0.3	0.5
TEMED	0.002	0.004	0.006	0.008	0.012	0.02
成分	配制不同体积SDS-PAGE分离胶所需各成分的体积(毫升)					
12%胶	5	10	15	20	30	50
蒸馏水	1.0	2.0	3.0	4.0	6.0	10.0
30% Acr-Bis(29:1)	2.0	4.0	6.0	8.0	12.0	20.0
1M Tris, pH8.8	1.9	3.8	5.7	7.6	11.4	19.0
10% SDS	0.05	0.1	0.15	0.2	0.3	0.5
10%过硫酸铵	0.05	0.1	0.15	0.2	0.3	0.5
TEMED	0.002	0.004	0.006	0.008	0.012	0.02
成分	配制不同体积SDS-PAGE分离胶所需各成分的体积(毫升)					
15%胶	5	10	15	20	30	50
蒸馏水	0.5	1.0	1.5	2.0	3.0	5.0
30% Acr-Bis(29:1)	2.5	5.0	7.5	10.0	15.0	25.0
1M Tris, pH8.8	1.9	3.8	5.7	7.6	11.4	19.0
10% SDS	0.05	0.1	0.15	0.2	0.3	0.5
10%过硫酸铵	0.05	0.1	0.15	0.2	0.3	0.5
TEMED	0.002	0.004	0.006	0.008	0.012	0.02

注：如果配制非变性胶，参考上述配方，不加10% SDS即可配制成非变性PAGE胶。

2. 按照如下表格配制SDS-PAGE的浓缩胶(也称堆积胶、积层胶或上层胶):

成分	配制不同体积SDS-PAGE浓缩胶所需各成分的体积(毫升)					
5%胶	2	3	4	6	8	10
蒸馏水	1.4	2.1	2.7	4.1	5.5	6.8
30% Acr-Bis(29:1)	0.33	0.5	0.67	1.0	1.3	1.7
1M Tris, pH6.8	0.25	0.38	0.5	0.75	1.0	1.25
10% SDS	0.02	0.03	0.04	0.06	0.08	0.1
10%过硫酸铵	0.02	0.03	0.04	0.06	0.08	0.1
TEMED	0.002	0.003	0.004	0.006	0.008	0.01

使用本产品的文献:

- Deng XQ, Chen LL, Li NX. The expression of SIRT1 in nonalcoholic fatty liver disease induced by high-fat diet in rats. *Liver Int.* 2007 Jun; 27(5):708-15.
- Wang PH, Gu ZH, Huang XD, Liu BD, Deng XX, Ai HS, Wang J, Yin ZX, Weng SP, Yu XQ, He JG. An immune deficiency homolog from the white shrimp, *Litopenaeus vannamei*, activates antimicrobial peptide genes. *Mol Immunol.* 2009 May;46(8-9):1897-904.
- Liang QL, Wang BR, Li GH. DcR3 and survivin are highly expressed in colorectal carcinoma and closely correlated to its clinicopathologic parameters. *J Zhejiang Univ Sci B.* 2009;10(9):675-82.
- Deng XQ, Cheng JL, Zhang YP, Li NX, Chen LL. Effects of caloric restriction on SIRT1 expression and apoptosis of islet beta cells in type 2 diabetic rats. *Springer Verlag.* 2010 Dec;47 Suppl 1:177-85.
- Cao X, Zhang Y, Zou L, Xiao H, Chu Y, Chu X. Persistent oxygen-glucose deprivation induces astrocytic death through two different pathways and calpain-mediated proteolysis of cytoskeletal proteins during astrocytic oncosis. *Neurosci Lett.* 2010;479(2):118-22.
- Cao X, Xiao H, Zhang Y, Zou L, Chu Y, Chu X. 1, 5-Dicaffeoylquinic acid-mediated glutathione synthesis through activation of Nrf2 protects against OGD/reperfusion-induced oxidative stress in astrocytes. *Brain Res.* 2010;1347:142-8.
- Huang L, Bi HC, Liu YH, Wang YT, Xue XP, Huang M. CAR-mediated

- up-regulation of CYP3A4 expression in LS174T cells by Chinese herbal compounds. *Drug Metab Pharmacokinet.* 2011;26(4):331-40.
8. Li Q, Lei RX, Zhou XD, Kolosov VP, Perelman JM. Regulation of PMA-induced MUC5AC expression by heparin in human bronchial epithelial cells. *Mol Cell Biochem.* 2012 Jan;360(1-2):383-91.
  9. Luan HF, Zhao ZB, Zhao QH, Zhu P, Xiu MY. Hydrogen sulfide postconditioning protects isolated rat hearts against ischemia and reperfusion injury mediated by the JAK2/STAT3 survival pathway. *Braz J Med Biol Res.* 2012 Oct;45(10):898-905.
  10. Chen Z, Qing J, Qin G, Hu L. Construction and characterization of bifunctional TIM-3-EGFP fusion proteins. *Protein Expr Purif.* 2012 Nov;86(1):1-6.
  11. Huang L, Huang M, Li YH, Li RM, Zeng Y, Kuang SY, Zhang L, Wang YT, Bi HC. Up-regulation of CYP3A expression through pregnant X receptor by praeruptorin D isolated from *Peucedanum praeruptorum* Dunn. *J Ethnopharmacol.* 2013 Jul 9;148(2):596-602.
  12. Zhang H, Wang ZW, Wu HB, Li Z, Li LC, Hu XP, Ren ZL, Li BJ, Hu ZP. Transforming growth factor- $\beta$ 1 induces matrix metalloproteinase-9 expression in rat vascular smooth muscle cells via ROS-dependent ERK-NF- $\kappa$ B pathways. *Mol Cell Biochem.* 2013 Mar;375(1-2):11-21.
  13. Liu R, Liu X, Zheng Y, Gu J, Xiong S, Jiang P, Jiang X, Huang E, Yang Y, Ge D, Chu Y. MicroRNA-7 sensitizes non-small cell lung cancer cells to paclitaxel. *Oncol Lett.* 2014 Nov;8(5):2193-2200.
  14. Zhao W, Zhao J, Hou M, Wang Y, Zhang Y, Zhao X, Zhang C, Guo D. HuR and TIA1/TIAL1 are involved in regulation of alternative splicing of SIRT1 pre-mRNA. *Int J Mol Sci.* 2014 Feb 20;15(2):2946-58.
  15. Chen D, Tao X, Wang Y, Tian F, Wei Y, Chen G, Shen H, Wang Z, Yu Z, Li H, Chen G. Curcumin accelerates reendothelialization and ameliorates intimal hyperplasia in balloon-injured rat carotid artery via the upregulation of endothelial cell autophagy. *Int J Mol Med.* 2015 Dec;36(6):1563-71.
  16. Liu X, Jiang X, Liu R, Wang L, Qian T, Zheng Y, Deng Y, Huang E, Xu F, Wang JY, Chu Y. B cells expressing CD11b effectively inhibit CD4+ T-cell responses and ameliorate experimental autoimmune hepatitis in mice. *Hepatology.* 2015 Nov;62(5):1563-75.
  17. He B, Tao H, Liu S, Wei A. Protective effect of carboxymethylated chitosan on hydrogen peroxide-induced apoptosis in nucleus pulposus cells. *Mol Med Rep.* 2015 Mar;11(3):1629-38.
  18. Gao CQ, Zhao YL, Li HC, Sui WG, Yan HC, Wang XQ. Heat stress inhibits proliferation, promotes growth, and induces apoptosis in cultured Lantang swine skeletal muscle satellite cells. *J Zhejiang Univ Sci B.* 2015 Jun;16(6):549-59.
  19. Li F, Luo J, Wu Z, Xiao T, Zeng O, Li L, Li Y, Yang J. Hydrogen sulfide exhibits cardioprotective effects by decreasing endoplasmic reticulum stress in a diabetic cardiomyopathy rat model. *Mol Med Rep.* 2016 Jul;14(1):865-73.
  20. Zhang X, Liu S, Zhang G, Zhong M, Liu T, Wei M, Wu D, Huang X, Cheng Y, Wu Q, Hu S. Bariatric Surgery Ameliorates Diabetic Cardiac Dysfunction by Inhibiting ER Stress in a Diabetic Rat Model. *Obes Surg.* 2016 Dec 15. [Epub ahead of print]
  21. Wang Y, Zhang X, Zhong M, Liu T, Zhang G, Liu S, Guo W, Wei M, He Q, Sun D, Hu S. Improvements of Glucose and Lipid Metabolism After Jejuno-ileal Circuit Procedure in a Non-obese Diabetic Rat Model. *Obes Surg.* 2016 Aug;26(8):1768-76.
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