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碧云天生物技术/Beyotime Biotechnology

订货热线: 400-168-3301或800-8283301

订货e-mail: order@beyotime.com

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网址: http://www.beyotime.com

SDS-PAGE蛋白上样缓冲液(5X)

产品编号	产品名称	包装
P0015	SDS-PAGE蛋白上样缓冲液(5X)	2ml

产品简介:

- SDS-PAGE蛋白上样缓冲液(SDS-PAGE Sample Loading Buffer, 5X), 是一种经过改良的以溴酚蓝为染料, 5倍浓缩的蛋白上样缓冲液。
- 可以用于常规的SDS-PAGE蛋白样品的上样。

包装清单:

产品编号	产品名称	包装
P0015	SDS-PAGE蛋白上样缓冲液(5X)	1ml×2
—	说明书	1份

保存条件:

-20°C保存, 至少一年有效。

注意事项:

- SDS-PAGE蛋白上样缓冲液(5X)中含少量DTT, 有轻微刺激性气味, 但不含剧毒的巯基乙醇。
- SDS-PAGE蛋白上样缓冲液(5X)必须完全溶解后再使用。
- 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. 在室温或不超过37°C的水浴中溶解SDS-PAGE上样缓冲液(5X)。水浴溶解后立即室温存放, 尽量避免长时间置于水浴中。
2. 按照每4微升蛋白样品加入1微升蛋白上样缓冲液(5X)的比例, 混合蛋白样品和蛋白上样缓冲液(5X)。
3. 100°C或沸水浴加热3-5分钟, 以充分变性蛋白。

注意: 如果起始时细胞或组织的用量较大, 基因组DNA含量较高, 煮沸3-5分钟后有可能仍然比较粘稠或者有粘稠状的半透明物体。此时需要再煮沸5-10分钟或者加入适量稀释成1X的蛋白上样缓冲液后再煮沸3-5分钟。充分煮沸后一方面可以使结合在基因组DNA上的蛋白充分释放, 同时会导致基因组DNA的部分断裂从而使粘稠感消失, 这样就不会影响后续的上样操作了。

4. 冷却到室温后, 直接上样到SDS-PAGE胶加样孔内即可。
5. 通常电泳至蓝色染料到达胶的底端处附近即可停止电泳。

使用本产品的文献:

1. Cai H, Yin D, Zhang L, Yang X, Xu X, Liu W, Zheng X, Zhang H, Wang J, Xu Y, Cheng D, Zheng M, Han Y, Wu M, Wang Y. Preparation and biological evaluation of 2-amino-6-[18F]fluoro-9-(4-hydroxyl-3-hydroxy-methylbutyl) purine (6-[18F]FPCV) as a novel PET probe for imaging HSV1-tk reporter gene expression. Nucl Med Biol. 2007 Aug;34(6):717-25.
2. Yuan Q, Li PD, Li BH, Yang XZ, Xu SB, Liu XH, Zhou FX, Zhang WJ. Differential IL-4/Stat6 activities correlate with differential expression of regulatory genes SOCS-1, SHP-1, and PP2A in colon cancer cells. J Cancer Res Clin Oncol. 2009 Jan;135(1):131-40.
3. Li H, Zhang L, Huang Q. Differential expression of mitogen-activated protein kinase signaling pathway in the hippocampus of rats exposed to chronic unpredictable stress. Behav Brain Res. 2009 Dec 14;205(1):32-7.
4. Cao BY, Yang YP, Luo WF, Mao CJ, Han R, Sun X, Cheng J, Liu CF. Paeoniflorin, a potent natural compound, protects PC12 cells from MPP+ and acidic damage via autophagic pathway. J Ethnopharmacol. 2010;131(1):122-9.
5. Xie Y, Hao H, Kang A, Liang Y, Xie T, Sun S, Dai C, Zheng X, Xie L, Li J, Wang G. Integral pharmacokinetics of multiple lignan components in normal, CCl4-induced hepatic injury and hepatoprotective agents pretreated rats and correlations with hepatic injury biomarkers. J Ethnopharmacol. 2010 Sep 15;131(2):290-9.
6. Tang WJ, Wang LF, Xu XY, Zhou Y, Jin WF, Wang HF, Gao J. Autocrine/paracrine action of vitamin D on FGF23 expression in cultured rat osteoblasts. Calcif Tissue Int. 2010 May;86(5):404-10.
7. Tang DQ, Wei YQ, Yin XX, Lu Q, Hao HH, Zhai YP, Wang JY, Ren J. In vitro suppression of quercetin on hypertrophy and extracellular matrix accumulation in rat glomerular mesangial cells cultured by high glucose. Fitoterapia. 2011 Sep;82(6):920-6.
8. Wang D, Fang L, Li P, Sun L, Fan J, Zhang Q, Luo R, Liu X, Li K, Chen H, Chen Z, Xiao S. The leader proteinase of foot-and-mouth disease virus negatively regulates the type I interferon pathway by acting as a viral deubiquitinase. J Virol. 2011 Apr;85(8):3758-66.
9. Tang DQ, Wei YQ, Gao YY, Yin XX, Yang DZ, Mou J, Jiang XL. Protective effects of rutin on rat glomerular mesangial cells cultured in high glucose conditions. Phytother Res. 2011 Nov;25(11):1640-7.
10. Liu M, Li ZH, Xu FJ, Lai LH, Wang QQ, Tang GP, Yang WT. An oligopeptide ligand-mediated therapeutic gene nanocomplex for liver cancer-targeted therapy. Biomaterials. 2012 Mar;33(7):2240-50.
11. Lu X, Zhang N, Dong S, Hu Y. Involvement of GPR12 in the induction of neurite outgrowth in PC12 cells. Brain Res Bull. 2012 Jan 4;87(1):30-6.
12. Mao SS, Hua R, Zhao XP, Qin X, Sun ZQ, Zhang Y, Wu YQ, Jia MX,

- Cao JL, Zhang YM. Exogenous Administration of PACAP Alleviates Traumatic Brain Injury in Rats through a Mechanism Involving the TLR4/MyD88/NF- κ B Pathway. *J Neurotrauma*. 2012 Jul 1; 29(10):1941-59.
13. Jia P, Xu YJ, Zhang ZL, Li K, Li B, Zhang W, Yang H. Ferric ion could facilitate osteoclast differentiation and bone resorption through the production of reactive oxygen species. *J Orthop Res*. 2012 Nov; 30(11):1843-52.
 14. Xiang Y, Zheng K, Ju H, Wang S, Pei Y, Ding W, Chen Z, Wang Q, Qiu X, Zhong M, Zeng F, Ren Z, Qian C, Liu G, Kitazato K, Wang Y. Cofilin 1-mediated biphasic f-actin dynamics of neuronal cells affect herpes simplex virus infection and replication. *J Virol*. 2012 Aug; 86(16):8440-51.
 15. Xie Y, Wang G, Wang H, Yao X, Jiang S, Kang A, Zhou F, Xie T, Hao H. Cytochrome P450 dysregulations in thioacetamide-induced liver cirrhosis in rats and the counteracting effects of hepatoprotective agents. *Drug Metab Dispos*. 2012 Apr;40(4):796-802.
 16. Yang J, Zhang J, Chen W, Hu Z, Zhu J, Fang X, Yuan W, Li M, Hu X, Tan Y, Hu F, Rao X. Eliciting cross-neutralizing antibodies in mice challenged with a dengue virus envelope domain III expressed in *Escherichia coli*. *Can J Microbiol*. 2012 Apr;58(4):369-80.
 17. Luan HF, Zhao ZB, Zhao QH, Zhu P, Xiu MY. Hydrogen sulfide preconditioning 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.
 18. Ye HH, Wu KJ, Fei SJ, Zhang XW, Liu HX, Zhang JL, Zhang YM. Propofol participates in gastric mucosal protection through inhibiting the toll-like receptor-4/nuclear factor kappa-B signaling pathway. *Clin Res Hepatol Gastroenterol*. 2013 Feb;37(1):e3-15.
 19. Xiang Q, Wang Y, Wu W, Meng X, Qiao Y, Xu L, Liu X. Carnosic acid protects against ROS/RNS-induced protein damage and upregulates HO-1 expression in RAW264.7 macrophages. *Journal of Functional Foods*. 2013 Jan;Vol.5(1):362-369.
 20. Qin X, Sun ZQ, Zhang XW, Dai XJ, Mao SS, Zhang YM. TLR4 signaling is involved in the protective effect of propofol in BV2 microglia against OGD/reoxygenation. *J Physiol Biochem*. 2013 Dec;69(4):707-18.
 21. Jiao Q, Wang H, Hu Z, Zhuang Y, Yang W, Li M, Yu X, Liang J, Guo Y, Zhang H, Chen X, Cheng R, Yao Z. Lidocaine inhibits staphylococcal enterotoxin-stimulated activation of peripheral blood mononuclear cells from patients with atopic dermatitis. *Arch Dermatol Res*. 2013;305(7):629-636.
 22. Gao YD, Zheng JW, Li P, Cheng M, Yang J. Store-operated Ca²⁺ entry is involved in transforming growth factor- β 1 facilitated proliferation of rat airway smooth muscle cells. *J Asthma*. 2013 Jun;50(5):439-48.
 23. Ye HH, Hua R, Yu L, Wu KJ, Fei SJ, Qin X, Song Y, Cao JL, Zhang YM. Abnormal Expression of Toll-Like Receptor 4 Is Associated with Susceptibility to Ethanol-Induced Gastric Mucosal Injury in Mice. *Dig Dis Sci*. 2013 Oct;58(10):2826-39.
 24. You H, Li T, Zhang J, Lei Q, Tao X, Xie P, Lu W. Reduction in ischemic cerebral infarction is mediated through golgi phosphoprotein 3 and Akt/mTOR signaling following salvianolate administration. *Curr Neurovasc Res*. 2014 May;11(2):107-13.
 25. Ji CF, Ji YB. Apoptosis of human gastric cancer SGC-7901 cells induced by podophyllotoxin. *Exp Ther Med*. 2014 May;7(5):1317-1322.
 26. Ge XY, Yang LQ, Jiang Y, Yang WW, Fu J, Li SL. Reactive oxygen species and autophagy associated apoptosis and limitation of clonogenic survival induced by zoledronic acid in salivary adenoid cystic carcinoma cell line SACC-83. *PLoS One*. 2014 Jun 25;9(6):e101207.
 27. Li Y, Shen D, Tang X, Li X, Wo D, Yan H, Song R, Feng J, Li P, Zhang J, Li J. Chlorogenic acid prevents isoproterenol-induced hypertrophy in neonatal rat myocytes. *Toxicol Lett*. 2014 May 2;226(3):257-63.
 28. Liang C, Guo S, Yang L. Effects of all-trans retinoic acid on VEGF and HIF-1 α expression in glioma cells under normoxia and hypoxia and its anti-angiogenic effect in an intracerebral glioma model. *Mol Med Rep*. 2014 Nov;10(5):2713-9.
 29. He X, Song W, Liu C, Chen S, Hua J. Rapamycin inhibits acrolein-induced apoptosis by alleviating ROS-driven mitochondrial dysfunction in male germ cells. *Cell Prolif*. 2014 Apr;47(2):161-71.
 30. Mao H, Wang H, Ma S, Xu Y, Zhang H, Wang Y, Niu Z, Fan G, Zhu Y, Gao XM. Bidirectional regulation of bakuchiol, an estrogenic-like compound, on catecholamine secretion. *Toxicol Appl Pharmacol*. 2014 Jan 1;274(1):180-9.
 31. Xia Y, Qi F, Zou J, Yang J, Yao Z. Influenza vaccination during early pregnancy contributes to neurogenesis and behavioral function in offspring. *Brain Behav Immun*. 2014 Nov;42:212-21.
 32. Xin F, Jiang L, Liu X, Geng C, Wang W, Zhong L, Yang G, Chen M. Bisphenol A induces oxidative stress-associated DNA damage in INS-1 cells. *Mutat Res Genet Toxicol Environ Mutagen*. 2014 Jul 15;769:29-33.
 33. Yang Y, Hou J, Lin Z, Zhuo H, Chen D, Zhang X, Chen Y, Sun B. Attenuated *Listeria monocytogenes* as a cancer vaccine vector for the delivery of CD24, a biomarker for hepatic cancer stem cells. *Cell Mol Immunol*. 2014 Mar;11(2):184-96.
 34. Zhang S, Sun Y, Chen H, Dai Y, Zhan Y, Yu S, Qiu X, Tan L, Song C, Ding C. Activation of the PKR/eIF2 α signaling cascade inhibits replication of Newcastle disease virus. *Virology*. 2014 Mar 31;11:62.
 35. Liu GY, Jiang XX, Zhu X, He WY, Kuang YL, Ren K, Lin Y, Gou X. ROS activates JNK-mediated autophagy to counteract apoptosis in mouse mesenchymal stem cells in vitro. *Acta Pharmacol Sin*. 2015 Dec;36(12):1473-9.
 36. Li Y, Chen X, Tang X, Zhang C, Wang L, Chen P, Pan M, Lu C. DNA synthesis during endomitosis is stimulated by insulin via the PI3K/Akt and TOR signaling pathways in the silk gland cells of *Bombyx mori*. *Int J Mol Sci*. 2015 Mar 18;16(3):6266-80.
 37. Yan SX, Deng XM, Wang QT, Sun XJ, Wei W. Prednisone treatment inhibits the differentiation of B lymphocytes into plasma cells in MRL/MpSlac-lpr mice. *Acta Pharmacol Sin*. 2015 Nov;36(11):1367-76.
 38. Jin X, Liu Y, Liu J, Lu W, Liang Z, Zhang D, Liu G, Zhu H, Xu N, Liang S. The Overexpression of IQGAP1 and β -Catenin Is Associated with Tumor Progression in Hepatocellular Carcinoma In Vitro and In Vivo. *PLoS One*. 2015 Aug 7;10(8):e0133770.
 39. Zhu M, Sun WJ, Wang YL, Li Q, Yang HD, Duan ZL, He L, Wang Q. P38 participates in spermatogenesis and acrosome reaction prior to fertilization in Chinese mitten crab *Eriocheir sinensis*. *Gene*. 2015 Apr 1;559(2):103-11.
 40. Hong W, Xu XY, Qiu ZH, Gao JJ, Wei ZY, Zhen L, Zhang XL, Ye ZB. Sirt1 is involved in decreased bone formation in aged apolipoprotein E-deficient mice. *Acta Pharmacol Sin*. 2015 Dec;36(12):1487-96.
 41. Liu G, Song Y, Cui L, Wen Z, Lu X. Inositol hexaphosphate suppresses growth and induces apoptosis in HT-29 colorectal cancer cells in culture: PI3K/Akt pathway as a potential target. *Int J Clin Exp Pathol*. 2015 Feb 1;8(2):1402-10. eCollection 2015.
 42. Ma X, Dang C, Kang H, Dai Z, Lin S, Guan H, Liu X, Wang X, Hui W. Saikosaponin-D reduces cisplatin-induced nephrotoxicity by repressing ROS-mediated activation of MAPK and NF- κ B signalling pathways. *Int Immunopharmacol*. 2015 Sep;28(1):399-408.
 43. Wang M, Zhou W, Zhou X, Zhuang F, Chen Q, Li M, Ma T, Gu S. Antidepressant-like effects of alarin produced by activation of TrkB receptor signaling pathways in chronic stress mice. *Behav Brain Res*. 2015 Mar 1;280:128-40.
 44. Xiao W, Beibei F, Guangsi S, Yu J, Wen Z, Xi H, Youjia X. Iron overload increases osteoclastogenesis and aggravates the effects of ovariectomy on bone mass. *J Endocrinol*. 2015 Sep;226(3):121-34.
 45. Qu L, Gao Y, Sun H, Wang H, Liu X, Sun D. Role of PTEN-Akt-CREB Signaling Pathway in Nervous System Impairment of Rats with Chronic Arsenite Exposure. *Biol Trace Elem Res*. 2016 Apr;170(2):366-72.
 46. Li Q, Tang Y, Qin J, Yi L, Yang Y, Wang J, He J, Su Q, Tan H. Subcellular localization of DJ-1 in human HL-60 leukemia cells in response to diallyl disulfide treatment. *Mol Med Rep*. 2016 Nov;14(5):4666-4672.
 47. Wang J, Li J, Liu J, Xu M, Tong X, Wang J. Chlorogenic acid prevents isoproterenol-induced DNA damage in vascular smooth muscle cells. *Mol Med Rep*. 2016 Nov;14(5):4063-4068.
 48. L Chai Y, Z Xu J, L Zhang Y, Sheng GT. Corrigendum Effects of probucol on cultured human umbilical vein endothelial cells injured by hypoxia/reoxygenation - *Genet. Mol. Res*. 15 (1): gmr.15016752. *Genet Mol Res*. 2016 Jun 2;15(2). doi: 10.4238/gmr.150267521.
 49. Ma M, Bai J, Ling Y, Chang W, Xie G, Li R, Wang G, Tao K. Monoacylglycerol lipase inhibitor JZL184 regulates apoptosis and migration of colorectal cancer cells. *Mol Med Rep*. 2016 Mar; 13(3):2850-6.
 50. Hu C, Dong T, Li R, Lu J, Wei X, Liu P. Emodin inhibits epithelial to mesenchymal transition in epithelial ovarian cancer cells by regulation of GSK-3 β / β -catenin/ZEB1 signaling pathway. *Oncol Rep*. 2016 Apr; 35(4):2027-34.
 51. Liu P, Sun Y, Qiu G, Jiang H, Qiu G. Silencing of TBX20 gene expression in rat myocardial and human embryonic kidney cells leads to

- cell cycle arrest in G2 phase. *Mol Med Rep.* 2016 Oct;14(4):2904-14.
52. Guo C, Li C, Yang K, Kang H, Xu X, Xu X, Deng L. Increased EZH2 and decreased osteoblastogenesis during local irradiation-induced bone loss in rats. *Sci Rep.* 2016 Aug 8;6:31318.
 53. Yao B, Xu Y, Wang J, Qiao Y, Zhang Y, Zhang X, Chen Y, Wu Q, Zhao Y, Zhu G, Sun F, Li Z, Yuan H. Reciprocal regulation between O-GlcNAcylation and tribbles pseudokinase 2 (TRIB2) maintains transformative phenotypes in liver cancer cells. *Cell Signal.* 2016 Nov; 28(11):1703-12.
 54. Zou Q, Hong W, Zhou Y, Ding Q, Wang J, Jin W, Gao J, Hua G, Xu X. Bone marrow stem cell dysfunction in radiation-induced abscopal bone loss. *J Orthop Surg Res.* 2016 Jan 7;11:3.
 55. Ma F, Zhou Z, Li N, Zheng L, Wu C, Niu B, Tang F, He X, Li G, Hua J. Lin28a promotes self-renewal and proliferation of dairy goat spermatogonial stem cells (SSCs) through regulation of mTOR and PI3K/AKT. *Sci Rep.* 2016 Dec 12;6:38805.
 56. Qin J, He Y, Duan M, Luo M. Effects of Nuclear Factor-E2-related factor 2/Heme Oxygenase 1 on splanchnic hemodynamics in experimental cirrhosis with portal hypertension. *Microvasc Res.* 2016 Dec 23;111:12-19.
 57. Cao L, Li R, Chen X, Xue Y, Liu D. Neogonin A Inhibits Lipopolysaccharide-Induced Inflammatory Responses via Down regulation of the NF- κ B Signaling Pathway in RAW 264.7 Macrophages. *Inflammation.* 2016 Dec;39(6):1939-1948.
 58. Tan Z, Luo M, Yang J, Cheng Y, Huang J, Lu C, Song D, Ye M, Dai M, Gonzalez FJ, Liu A, Guo B. Chlorogenic acid inhibits cholestatic liver injury induced by α -naphthylisothiocyanate: involvement of STAT3 and NF κ B signalling regulation. *J Pharm Pharmacol.* 2016 Sep; 68(9):1203-13.
 59. Qu B, Xing R, Wang H, Chen X, Ge Q, Peng D, Wang G. Multiple effects of magnesium isoglycyrrhizinate on the disposition of docetaxel in docetaxel-induced liver injury. *Xenobiotica.* 2016 May 24:1-7.
 60. Zhang J, Zhao G, Lin J, Che C, Li C, Jiang N, Hu L, Wang Q. Role of PTX3 in corneal epithelial innate immunity against *Aspergillus fumigatus* infection. *Exp Eye Res.* 2016 Nov 23. pii: S0014-4835(16)30487-0.
 61. Cheong CU, Yeh CS, Hsieh YW, Lee YR, Lin MY, Chen CY, Lee CH. Protective Effects of Costunolide against Hydrogen Peroxide-Induced Injury in PC12 Cells. *Molecules.* 2016 Jul 9;21(7). pii: E898.
 62. Zhuang F, Li M, Gao X, Wang Y, Wang D, Ma X, Ma T, Gu S. The antidepressant-like effect of alarin is related to TrkB-mTOR signaling and synaptic plasticity. *Behav Brain Res.* 2016 Oct 15;313:158-71.
 63. Zhuang F, Zhou X, Gao X, Lou D, Bi X, Qin S, Sun C, Ye P, Wang Y, Ma T, Li M, Gu S. Cytokines and glucocorticoid receptors are associated with the antidepressant-like effect of alarin. *Peptides.* 2016 Feb; 76:115-29.
 64. Fu M, Song Y, Wen Z, Lu X, Cui L. Inositol Hexaphosphate and Inositol Inhibit Colorectal Cancer Metastasis to the Liver in BALB/c Mice. *Nutrients.* 2016 May 12;8(5). pii: E286.
 65. Fang Y, Xu Z, Shi Y, Pei F, Yang W, Ma N, Kimatu BM, Liu K, Qiu W, Hu Q. Protection mechanism of Se-containing protein hydrolysates from Se-enriched rice on Pb²⁺-induced apoptosis in PC12 and RAW264.7 cells. *Food Chem.* 2017 Mar 15;219:391-398.
 66. Lu Y, Xie T, Zhang Y, Zhou F, Ruan J, Zhu W, Zhu H, Feng Z, Zhou X. Triptolide Induces hepatotoxicity via inhibition of CYP450s in Rat liver microsomes. *BMC Complement Altern Med.* 2017 Jan 5;17(1):15.

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