



碧云天生物技术/Beyotime Biotechnology
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ERK1/2 Rabbit Monoclonal Antibody

产品编号	产品名称	包装
AF1051	ERK1/2 Rabbit Monoclonal Antibody	50μl

产品简介:

来源	用途	交叉反应性	分子量
Rabbit	WB, IP, IF, ICC, FC	H, M, R	42/44 kDa

WB, Western blot; IP, Immunoprecipitation; IF, Immunofluorescence; IHC, Immunohistochemistry; ICC, Immunocytochemistry; FC, Flow Cytometry; ELISA, Enzyme-linked Immunosorbent Assay; ChIP, Chromatin Immunoprecipitation Assay.

H, Human; M, Mouse; R, Rat; C, Chicken; Cw, Cow; Dg, Dog; Gp, Guinea pig; Hm, Hamster; Hr, Horse; Mk, Monkey; Pg, Pig; Rb, Rabbit; S, Sheep; Z, Zebrafish; All, all species expected.

- 配套提供了 Western 一抗稀释液, 可以用于 Western 检测或其它适当用途时的一抗稀释。
- 建议抗体使用时的稀释比例如下(实际使用时需根据抗原水平的高低作适当调整):

WB	IP	IF	IHC	ICC	FC	ELISA	ChIP
1:1000-1:5000	1:50-1:200	1:50-1:200	-	1:50-1:200	1:50-1:100	-	-

- 抗体详细信息如下:

About this Antibody	
Name	ERK1/2 Rabbit Monoclonal Antibody
Category	Rabbit Monoclonal Antibody (RabMAb); Primary antibody
Isotype	IgG
Purification	Affinity purification
About the Immunogen	
Immunogen	Recombinant protein
Gene ID	5595/5594(Human); 26413/26417(Mouse); 50689/116590(Rat)
SwissProt	P27361/P28482(Human); P63085/Q63844(Mouse); P21708/P63086(Rat)
Synonyms	ERK 1 ; ERK 2; MAPK 1; MAPK 2; MAPK 3; Mitogen-activated protein kinase 1; Mitogen-activated protein kinase 2
Category	MAPK
Background	Mitogen-activated protein kinase (MAPK) signaling pathways involve two closely related MAP kinases, known as extracellular-signal-related kinase 1 (ERK 1, p44) and 2 (ERK 2, p42). Growth factors, steroid hormones, G protein-coupled receptor ligands and neurotransmitters can initiate MAPK signaling pathways. Activation of ERK 1 and ERK 2 requires phosphorylation by upstream kinases such as MAP kinasekinase (MEK), MEK kinase and Raf-1. ERK 1 and ERK 2 phosphorylation can occur at specific tyrosine and threonine sites mapping within consensus motifs that include the threonine-glutamate-tyrosine motif. ERK activation leads to dimerization with other ERKs and subsequent localization to the nucleus. Active ERK dimers phosphorylate serine and threonine residues on nuclear proteins and influence a host of responses that include proliferation, differentiation, transcription regulation and development. The human ERK 1 gene maps to chromosome 16p11.2 and encodes a 379 amino acid protein that shares 83% sequence identity to ERK 2. The human ERK2 gene maps to chromosome 22q11.21 and encodes a 360-amino acid protein.

包装清单:

产品编号	产品名称	包装
AF1051	ERK1/2 Rabbit Monoclonal Antibody	50μl
AZ050	Western一抗稀释液	50ml

—	说明书	1份
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保存条件：

ERK1/2 Rabbit Monoclonal Antibody -20°C保存，Western一抗稀释液-20°C或4°C保存，一年有效。Western一抗稀释液优先推荐4°C保存，长期不使用可以考虑-20°C保存，但冻融可能会导致出现轻微的浑浊和少量不溶物。

注意事项：

- 如果本抗体用于Western blot (WB)、免疫荧光(IF)、免疫细胞化学(ICC)等实验，请注意回收使用过的稀释抗体。回收的抗体通常至少可以重复使用5-10次。稀释后的抗体，包括已经使用过的稀释抗体，请4°C保存。
- 回收后重复使用的抗体，使用方法同新鲜稀释的抗体。如果在重复使用过程中发现抗体出现轻微混浊现象，可以10,000g离心1-3分钟，取上清用于后续检测。如果回收的抗体出现明显的絮状物或长霉长菌等情况，则可以考虑废弃该抗体。
- 提供的Western一抗稀释液也可以用于免疫荧光(IF)、免疫组化(IHC)、免疫细胞化学(ICC)等适当用途。如果希望获得最佳的检测效果，请考虑使用上述检测专用的一抗稀释液。
- 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：

请根据抗体的实际用途选择相应的使用方法。

1. Western检测：

- a. 按照推荐的稀释比例用碧云天提供的Western一抗稀释液稀释抗体。
- b. 把经过封闭的蛋白膜与稀释好的一抗4°C缓慢摇动过夜或室温缓慢摇动2小时，确保稀释的抗体至少能在摇动的瞬间覆盖蛋白膜。
- c. 回收稀释的一抗，4°C保存以备下次继续使用。
- d. 按照Western的实验步骤进行后续的洗涤、二抗孵育、洗涤和检测等操作。具体操作可以参考如下网页：
<http://www.beyotime.com/support/western.htm>

2. 免疫染色：

可以使用碧云天生产的免疫染色一抗稀释液(P0103)稀释抗体，使用后注意回收稀释好的一抗，具体操作可以参考如下网页：
<http://www.beyotime.com/support/immunol-staining.htm>

3. 其它实验操作请自行参考适当的protocol进行。

4. 代表性图片：

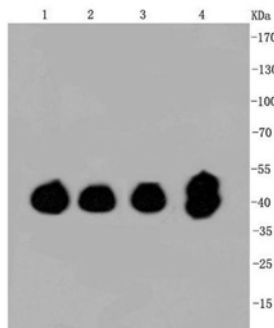


Fig. 1. Western blot analysis of ERK1/2 on different cell lysates using anti-ERK1/2 antibody at 1/1,000 dilution. Positive control: Lane 1: Hela; Lane 2: SW480; Lane 3: HCT116; Lane 4: PC12

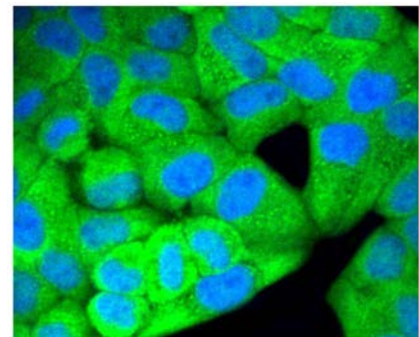


Fig. 2. ICC staining ERK1/2 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X-100 /PBS.

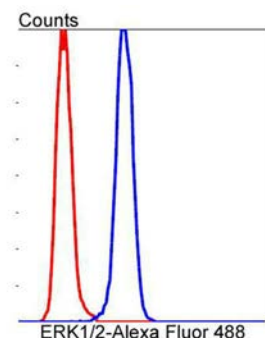


Fig. 3. Flow cytometric analysis of Hela cells with ERK1/2 antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

相关产品：

产品编号	产品名称	包装
P0006	Bradford蛋白浓度测定试剂盒	1000次
P0010	BCA蛋白浓度测定试剂盒(增强型)	500次
P0012	BCA蛋白浓度测定试剂盒	500次
P0012A	SDS-PAGE凝胶配制试剂盒	1盒
P0012AC	SDS-PAGE凝胶快速配制试剂盒	1盒
P0013	Western及IP细胞裂解液	100ml
P0013B	RIPA裂解液(强)	100ml
P0014B	SDS-PAGE电泳液	10×1L
P0015	SDS-PAGE蛋白上样缓冲液(5X)	2ml
P0018	BeyoECL Plus(超敏ECL化学发光试剂盒)	共100ml
P0018A	BeyoECL Star(特超敏ECL化学发光试剂盒)	共100ml
P0020	显影定影试剂盒	各1升
P0021B	Western转膜液	10×1L
P0023A	Western一抗稀释液	100ml
P0023B	Western封闭液	100ml
P0023C6	Western洗涤液(10X)	10×100ml
P0023D	Western二抗稀释液	100ml
P0025	Western一抗二抗去除液(强碱性)	250ml
P0066	预染蛋白质分子量标准(19-117kD)	200μl
P0068	彩色预染蛋白质分子量标准(10-180kD)	200μl
P0071	BeyoColor™彩色预染蛋白分子量标准(6.5-270kD)	200μl
P0075	BeyoColor™彩色预染蛋白分子量标准(10-170kD)	200μl
P0078	BeyoColor™彩色预染蛋白分子量标准(15-120kD)	200μl
P0098	免疫染色固定液	100ml
P0102	免疫染色封闭液	100ml
P0103	免疫染色一抗稀释液	100ml
P0106	免疫染色洗涤液	250ml
P0108	免疫荧光染色二抗稀释液	100ml
P0110	免疫染色(非荧光)二抗稀释液	100ml
P0126	抗荧光淬灭封片液	5ml
P0252	QuickBlock™ Western封闭液	100ml
P0256	QuickBlock™ Western一抗稀释液	100ml
P0258	QuickBlock™ Western二抗稀释液	100ml
P0260	QuickBlock™免疫染色封闭液	100ml

P0262	QuickBlock™免疫染色一抗稀释液	100ml
P0265	QuickBlock™免疫荧光染色二抗稀释液	100ml
P0267	QuickBlock™免疫组化染色二抗稀释液	100ml
FFP24	PVDF膜(进口分装, 6.6×8.5cm, 0.2μm)	20张/包装
FFP32	PVDF膜(进口分装, 6.6×8.5cm, 0.45μm)	20张/包装
FFP51	转印滤纸(7.5×10cm)	100片/包装
FF057	X-OMAT BT胶片(原柯达, 5×7英寸)	100张/盒
FFC58	压片暗盒(5×7英寸)	1个

使用本产品的文献：

1. Cheng D, Zhang X, Tang J, Kong Y, Wang X, Wang S . Chlorogenic acid protects against aluminum toxicity via MAPK/Akt signaling pathway in murine RAW264.7 macrophages. *J Inorg Biochem.* 2019 Jan 190:113-120.
2. Tang Z, Cao F, Zhang H, Tang J, Li H, Zhang Y, Feng B, Wang H . Peripheral pain is enhanced by insulin-like growth factor 1 and its receptors in a mouse model of type 2 diabetes mellitus. *J Diabetes.* 2019 Apr 11(4):309-315.
3. 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. eCollection 2019.
4. Zhou MF, Feng ZP, Ou YC, Peng JJ, Li K, Gong HD, Qiu BH, Liu YW, Wang YJ, Qi ST . Endoplasmic reticulum stress induces apoptosis of arginine vasopressin neurons in central diabetes insipidus via PI3K/Akt pathway. *CNS Neurosci Ther.* 2019 May 25(5):562-574.
5. Chang G, Ma N, Zhang H, Wang Y, Huang J, Liu J, Dai H, Shen X . Sodium Butyrate Modulates Mucosal Inflammation Injury Mediated by GPR41/43 in the Cecum of Goats Fed a High Concentration Diet. *Front Physiol.* 2019 Aug 30 10:1130.
6. Wang Y, Hui J, Li R, Fu Q, Yang P, Xiao Y, Hui J . GBX2, as a tumor promoter in lung adenocarcinoma, enhances cells viability, invasion and migration by regulating the AKT/ERK signaling pathway. *J Gene Med.* 2020 Feb 22(2):e3147.

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