



碧云天生物技术/Beyotime Biotechnology  
 订货热线: 400-1683301 或 800-8283301  
 订货 e-mail: order@beyotime.com  
 技术咨询: info@beyotime.com  
 网址: http://www.beyotime.com

## Caspase-3抗体(兔多抗)

产品编号	产品名称	包装
AC030	Caspase-3抗体(兔多抗)	>20次

### 产品简介:

来源	用途	交叉反应性	抗体识别位点	Caspase-3分子量
Rabbit	WB, IP, IHC	H, M, R, Mk	Caspase-3	~35/17kD

WB, Western blot; IP, immunoprecipitation; IHC, immunohistochemistry.

H, human; M, mouse; R, rat; Mk, monkey.

- 本Caspase-3抗体(Caspase-3 antibody)为进口分装, 用人工合成的人Caspase-3本身的切割位点处一段多肽, 经适当修饰后免疫rabbit, 然后用protein A和抗原多肽亲和柱经过两步纯化得到的高纯度多克隆抗体。
- 本Caspase-3抗体可以识别全长的Caspase-3 (35kD), 也可以识别Caspase-3被剪切后产生的17kD片段。未发现和其它Caspase家族蛋白有交叉反应。
- Caspase-3是细胞凋亡过程中最关键的执行分子(key executioner)之一, 可以剪切细胞凋亡过程中的许多关键蛋白, 例如PARP。Caspase-3的激活需要从没有活性的全长Caspase-3(35kD), 在Asp28和Ser29之间及Asp175和Ser176之间进行剪切, 产生有活性的17kD肽段。
- Caspase-3的激活常被作为细胞凋亡的一个重要指标。
- 配套提供了Western一抗稀释液, 可以用于Western检测时的一抗稀释。
- 建议本抗体使用时的起始稀释比例参考下表(实际使用时需根据抗原水平的高低作适当调整)。Western检测全长Caspase-3参考下表按照1:1000稀释, 检测Caspase-3被剪切后产生的17kD肽段须根据Caspase-3的激活情况酌情稀释。

WB	IP	IHC
1:1000	1:50	1:500

- 本抗体如果用于常规的Western检测至少可以检测20次。

### 包装清单:

产品编号	产品名称	包装
AC030-1	Caspase-3抗体(兔多抗)	20μl
AC030-2	Western一抗稀释液	20ml
—	说明书	1份

### 保存条件:

Caspase-3抗体-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:

- 对于本抗体, Western检测时一抗要4°C缓慢摇动过夜, 如果仅短时间与一抗孵育检测效果较差。
- 在Western实验后, 请注意回收稀释的抗体。回收的抗体在进行Western实验时至少可以重复使用10次。稀释后的抗体, 包括已经使用过的稀释抗体, 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10000g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。
- 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检测:

- 按照1:1000用碧云天提供的Western一抗稀释液稀释抗体。
- 把经过封闭的蛋白膜与稀释好的一抗4°C缓慢摇动过夜, 确保稀释的抗体至少能在摇动的瞬间覆盖蛋白膜。
- 回收稀释的一抗, 4°C保存以备下次继续使用。
- 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. 其它实验操作请自行参考适当的protocol进行。

### 使用本产品的文献：

1. Wenhui Li, Zilin Zhang, Liangliang Zhang, Qingfeng Zhou, Yuwan Li, Lin Yi, Hongxing Ding, Mingqiu Zhao, Jinding Chen, Shuangqi Fan . Interaction of SERINC5 and IFITM1/2/3 regulates the autophagy-apoptosis-immune network under CSFV infection Virulence. 2022 Dec;13(1):1720-1740.
2. Xiaoyun Ye, Yingying Li, Boyang Lv, Bingquan Qiu, Shangyue Zhang, Hanlin Peng, Wei Kong, Chaoshu Tang, Yaqian Huang, Junbao Du, Hongfang Jin . Endogenous Hydrogen Sulfide Persulfidates Caspase-3 at Cysteine 163 to Inhibit Doxorubicin-Induced Cardiomyocyte Apoptosis Oxid Med Cell Longev. 2022 May 4;2022:6153772.
3. Jing HX, Duan de J, Zhou H, Hu QM, Lei TC . . Adipose derived mesenchymal stem cell facilitated TRAIL expression in melanoma treatment in vitro. Mol Med Rep. 2016 Jul;14(1):195-201.
4. Yu XB, Chen XH, Ling F, Hao K, Wang GX, Zhu B . . Moroxydine hydrochloride inhibits grass carp reovirus replication and suppresses apoptosis in Ctenopharyngodon idella kidney cells. ANTIVIR RES. 2016 Jul;131:156-65.
5. Bao ZQ, Liao TT, Yang WR, Wang Y, Luo HY, Wang XZ . . Heat stress-induced autophagy promotes lactate secretion in cultured immature boar Sertoli cells by inhibiting apoptosis and driving SLC2A, LDHA, and SLC16A1 expression. Theriogenology. 2017 Jan 1;87:339-48.
6. Ma W, Li Z, Lu Z, Tan W, Zhang Z, Li Y, Yang Z, Zhou J, Tang H, Cui H . . Protective Effects of Acupuncture in Cardiopulmonary Bypass-Induced Lung Injury in Rats. Inflammation. 2017 Aug;40(4):1275-1284.
7. Li Y, Li L, Zhu M, Ye L, Yang Q . . Upregulation of Yes-associated protein and transcriptional co-activator with PDZ-binding motif influences the behavior of LOVO human colon adenocarcinoma cells. Exp Ther Med. 2017 Oct;14(4):3831-3835.
8. Zhang Y, Zhang L, Yu C, Du X, Liu X, Liu J, An X, Wang J, Song Y, Li G, Cao B . . Effects of interferon tau on endometrial epithelial cells in caprine in vitro. Gene Expr Patterns. 2017 Nov;25-26:142-148.
9. Fangmiao Yu, Yaru Zhang, Lei Ye, Yunping Tang, Guofang Ding, Xiaojun Zhang, Zuisu Yang . A Novel Anti-proliferative Pentapeptide (ILYMP) Isolated From Cyclina Sinensis Protein Hydrolysate Induces Apoptosis of DU-145 Prostate Cancer Cells Mol Med Rep. 2018 Jul;18(1):771-778.
10. Ding L, Gu H, Lan Z, Lei Q, Wang W, Ruan J, Yu M, Lin J, Cui Q . Downregulation of cyclooxygenase-1 stimulates mitochondrial apoptosis through the NF- $\kappa$ B signaling pathway in colorectal cancer cells. Oncol Rep. 2019 Jan 41(1):559-569.
11. Xu J, Zhang G, Tong Y, Yuan J, Li Y, Song G . Corilagin induces apoptosis, autophagy and ROS generation in gastric cancer cells in vitro. Int J Mol Med. 2019 Feb 43(2):967-979.
12. Ge LN, Yan L, Li C, Cheng K . Bavachinin exhibits antitumor activity against non-small cell lung cancer by targeting PPAR $\gamma$ . Mol Med Rep. 2019 Sep 20(3):2805-2811.
13. Linlu Tian, Hongxue Meng, Xiao Dong, Xinlei Li, Zilin Shi, Hulun Li, Lie Zhang, Yue Yang, Ruijie Liu, Chunying Pei, Bo Li, Hongwei Xu, Rui Li . IRGM promotes melanoma cell survival through autophagy and is a promising prognostic biomarker for clinical application Mol Ther Oncolytics. 2020 Dec 19;20:187-198.
14. Xiaoye Cheng, Zain-Ui Aabdin, Yan Wang, Nana Ma, Hongyu Dai, Xiaoli Shi, Xiangzhen Shen . Glutamine pretreatment protects bovine mammary epithelial cells from inflammation and oxidative stress induced by  $\gamma$ -D-glutamyl-meso-diaminopimelic acid (iE-DAP) J Dairy Sci. 2021 Feb;104(2):2123-2139.
15. Jingjing Zong, Hao Peng, Xin Qing, Zhe Fan, Wenjing Xu, Xuanlong Du, Ruihua Shi, Yewei Zhang . pH-Responsive Pluronic F127-Lenvatinib-Encapsulated Halogenated Boron-Dipyrromethene Nanoparticles for Combined Photodynamic Therapy and Chemotherapy of Liver Cancer ACS Omega. 2021 Apr 30;6(18):12331-12342.
16. Lingzhi Niu, Xin Liu, Jing Zhao, Yuanping Wang, Yanxia Li, Ke Li, Yingjian Sun, Yajuan Zheng . 5-Nitro-2-(3-phenylpropylamino) benzoic acid induces apoptosis of human lens epithelial cells via reactive oxygen species and endoplasmic reticulum stress through the mitochondrial apoptosis pathway Int J Mol Med. 2021 Apr;47(4):59.
17. Hongchao Gou, Zhibiao Bian, Rujian Cai, Pinpin Chu, Shuai Song, Yan Li, Zhiyong Jiang, Kunli Zhang, Dongxia Yang, Chunling Li . RIPK3-Dependent Necroptosis Limits PRV Replication in PK-15 Cells Front Microbiol. 2021 Jun 4;12:664353.
18. Yanru Xue, Gejing Zhang, Shoujie Zhou, Shenghang Wang, Huanhuan Lv, Liangfu Zhou, Peng Shang . Iron Chelator Induces Apoptosis in Osteosarcoma Cells by Disrupting Intracellular Iron Homeostasis and Activating the MAPK Pathway Int J Mol Sci. 2021 Jul 2;22(13):7168.
19. Yingzhuo Xu, Jian Wang, Xu Wang, Xiaoshu Zhou, Jing Tang, Xiaohua Jie, Xijie Yang, Xinrui Rao, Yunhong Xu, Biyuan Xing, Zhenyu Li, Gang Wu . Targeting ADRB2 enhances sensitivity of non-small cell lung cancer to VEGFR2 tyrosine kinase inhibitors Cell Death Discov. 2022 Jan 24;8(1):36.
20. Zeming Chen, Runzhui Lin, Hua Zhuo, Fengjie Xu, Xingmu Liu . Intravenous immunoglobulin is effective in alleviating hepatic ischemia-reperfusion injury: a rat model study Mol Biol Rep. 2022 Jan;49(1):341-349.
21. Bo Xia, Peng Zhang, Yuling Lai, Shichao Cui, Zhenyue Chen, Qingying Yu, Haiwang Wu, Lihua Zeng, Baozhen Xie, Jingwei Li, Huimin Zhang, Songping Luo, Jie Gao . Research on the Mechanism of Asperosaponin VI for Treating Recurrent Spontaneous Abortion by Bioinformatics Analysis and Experimental Validation Evid Based Complement Alternat Med. 2022 Jun 23;2022:8099853.
22. Yuanxin Zhang, Huiyu Shi, Yanhong Yun, Haibo Feng, Xuemei Wang . The Effect of Anthocyanins from Dioscorea alata L. on Antioxidant Properties of Perinatal Hainan Black Goats and Its Possible Mechanism in the Mammary Gland Animals (Basel). 2022 Nov 28;12(23):3320.
23. Jing Ji, Zhen Zhang, Xingbei He, Gang Pan, Guanchu Li, Jinyu Lv, Yuxin Xu, Mengru Xie, Jing Feng, Weiling Wang, Bin Liu, Jinming Ma, Xiujun Wang . A novel ribociclib derivative WXJ-103 exerts anti-breast cancer effect through CDK4/6 Anticancer Drugs. 2023 Aug 1;34(7):803-815.

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