

Recombinant human Cleaved Caspase-3 protein (Active) ab52101

4 References

描述	
产品名称	重组人Cleaved Caspase-3蛋白(Active)
生物活性	Specific activity: ≥ 15,000 units/mg Unit definition: One unit of the recombinant caspase-3 is the enzyme activity that cleaves 1 nmol of the caspase substrate DEVD-pNA (pNA: pnitroaniline) per hour at 37oC in a reaction solution containing 50 mM Hepes, pH 7.2, 50 mM NaCl, 0.1% Chaps, 10 mM EDTA, 5% Glycerol, and 10 mM DTT.
纯度	> 95 % SDS-PAGE.
表达系统	Escherichia coli
Accession	<u>P42574</u>
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
序列	MENTENSVDS KSIKNLEPKI IHGSESMDSG ISLDNSYKMD YPEMGLCIII NNKNFHKSTG MTSRSGTDVD AANLRETFRN LKYEVRNKND LTREEIVELM RDVSKEDHSK RSSFVCVLLS HGEEGIIFGT NGPVDLKKIT NFFRGDRCRS LTGKPKLFII QACRGTELDG GIETDSGVDD DMACHKIPVE ADFLYAYSTA PGYYSWRNSK DGSWFIQSLC AMLKQYADKL EFMHILTRVN RKVATEFESF SFDATFHAKK QIPCIVSMLT KELYFYH
氨基酸	1 to 277
额外的序列信息	(Gene ID 836)

技术指标

Our **Abpromise guarantee** covers the use of **ab52101** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Functional Studies
形式	Lyophilized
补充说明	<p>This product is manufactured by BioVision, an Abcam company and was previously called 1083 Caspase-3, human recombinant. 1083-100 is the same size as the 100 unit size of ab52101.</p> <p>The recombinant active human Caspase 3 spontaneously undergoes autoprocessing to yield subunits characteristic of the native enzyme.</p> <p>Cleaved Caspase 3 is useful in studying enzyme regulation, determining target substrates, screening caspase inhibitors, or as a positive control in caspase activity assays. The active Caspase 3 preferentially cleaves Caspase 3 substrates e.g. DEVD-AFC or DEVD-pNA.</p> <p>MW: large (17 kD) and small (11 kD) subunits.</p>
制备和贮存	
稳定性和存储	<p>Shipped at 4°C. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.</p> <p>Constituents: PBS, 5% Glycerol (glycerin, glycerine), 1.71% HEPES, 1.71% Sodium chloride, 0.1% CHAPS, 0.16% EDTA, 0.12% DTT</p> <p>This product is an active protein and may elicit a biological response in vivo, handle with caution.</p>
复溶	Centrifuge the vial prior to opening. Reconstitute to 1 unit per µl in water.
常规信息	
功能	Involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-Gly-217' bond. Cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7 and -9. Involved in the cleavage of huntingtin. Triggers cell adhesion in sympathetic neurons through RET cleavage.
组织特异性	Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune system.
序列相似性	Belongs to the peptidase C14A family.
翻译后修饰	<p>Cleavage by granzyme B, caspase-6, caspase-8 and caspase-10 generates the two active subunits. Additional processing of the propeptides is likely due to the autocatalytic activity of the activated protease. Active heterodimers between the small subunit of caspase-7 protease and the large subunit of caspase-3 also occur and vice versa.</p> <p>S-nitrosylated on its catalytic site cysteine in unstimulated human cell lines and denitrosylated upon activation of the Fas apoptotic pathway, associated with an increase in intracellular caspase activity. Fas therefore activates caspase-3 not only by inducing the cleavage of the caspase zymogen to its active subunits, but also by stimulating the denitrosylation of its active site thiol.</p>
细胞定位	Cytoplasm.

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