
anti-caspase-5

Cat #: HM1061
Goat polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

Caspase-5 (also designated ICERel-III, TY, ICH-3 and caspase-12 in mouse) is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspase-5 is more closely related to caspase-4 than to other homologues. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. Caspase-5 can cleave its own precursor, an activity that requires the cysteine 245 residue. The expression of caspase-5 was found to be regulated by interferon-gamma and lipopolysaccharide.

SPECIFICITY

This antibody can be used in the detection of the p10 subunit and precursor of caspase5 of human origin by Western blotting and immunohistochemistry. May cross-react with caspase-4.

Recommended dilution for Western blotting: 1:1000.

IMMUNOGEN

A synthetic peptide derived from the carboxy terminus of human caspase-5.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

1. Cohen, G.M. 1997. Caspases: the executioners of apoptosis. *Biochem. J.* 326: 1-16.
2. Munday, N.A., Vaillancourt, J.P., Ali, A., Casano, F.J., Miller, D.K., Moliniaux, S.M., Yamin, T.T., Yu, V.L., and Nicholson, D.W. 1995. Molecular cloning and proapoptotic activity of ICERelIII and ICERelIII, members of the ICE/CED-3 family of cysteine proteases. *J. Biol. Chem.* 270: 15870-15876.
3. Faucheu, C., Blanchet, A.M., Collard-Dutilleul, V., Lalanne, J.L., and Diu-Hercend, A. 1996. Identification of a cysteine protease closely related to interleukin-1 beta-converting enzyme. *J. Biochem.* 236: 207-213.
4. Schwartz, S. Jr., Yamamoto, H., Navarro, M., Maestro, M., Reventos, J., and Perucho, M. 1999. Frameshift mutations at mononucleotide repeats in caspase-5 and other target genes in endometrial and gastric cancer of the microsatellite mutator phenotype. *Cancer Res.* 59: 2995-3002.

5. Krippner-Heidenreich, A., Talanian, R.V., Sekul, R., Kraft, R., Thole, H., Ottleben, H. and Luscher, B. (2001) Targeting of the transcription factor Max during apoptosis: phosphorylation-regulated cleavage by caspase-5 at an unusual glutamic acid residue in position P1. *Biochem. J.* 358, 705-715.
6. Hosomi, Y., Gemma, A., Hosoya, Y., Nara, M., Okano, T., Takenaka, K., Yoshimura, A., Koizumi, K., Shimizu, K. and Kudoh, S. (2003) Somatic mutation of the Caspase-5 gene in human lung cancer. *Int. J. Mol. Med.* 12, 443-446.

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