
anti-Caspase 1

Cat #: HM1057
Rabbit polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

Caspase-1, originally designated ICE, 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. 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. The 45 kDa caspase-1 precursor is cleaved into a 10 kDa subunit and 20 kDa subunit. In addition to apoptosis, caspase-1 is primarily involved in the processing of pro-inflammatory cytokines.

SPECIFICITY

This antibody specifically recognizes Caspase 1 of human origin.

The antibody can be used in Western blotting, immunoprecipitation and immunostaining.

IMMUNOGEN

A peptide mapping at the carboxy terminus of the p10 subunit of Caspase-1 of human origin.

STORAGE

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

REFERENCES

1. Cerretti,D.P., Kozlosky,C.J., Mosley,B., Nelson,N., Van Ness,K., Greenstreet,T.A., March,C.J., Kronheim,S.R., Druck,T., Cannizzaro,L.A. et al. (1992) Molecular cloning of the interleukin-1 beta converting enzyme. *Science* 256, 97-100.
2. Wilson,K.P., Black,J.A., Thomson,J.A., Kim,E.E., Griffith,J.P., Navia,M.A., Murcko,M.A., Chambers,S.P., Aldape,R.A., Raybuck,S.A. et al. (1994) Structure and mechanism of interleukin-1 beta converting enzyme. *Nature* 370, 270-275.
3. Ona,V.O., Li,M., Vonsattel,J.P., Andrews,L.J., Khan,S.Q., Chung,W.M., Frey,A.S., Menon,A.S., Li,X.J., Stieg,P.E., Yuan,J., Penney,J.B., Young,A.B., Cha,J.H. and Friedlander,R.M. (1999) Inhibition of caspase-1 slows disease progression in a mouse model of Huntington's disease. *Nature* 399, 263-267.
4. Tatsuta,T., Shiraiishi,A. and Mountz,J.D. (2000) The prodomain of caspase-1 enhances Fas-mediated apoptosis through facilitation of caspase-8 activation. *J. Biol. Chem.* 275, 14248-14254.

5. Razmara,M., Srinivasula,S.M., Wang,L., Poyet,J.L., Geddes,B.J., DiStefano,P.S., Bertin,J. and Alnemri,E.S. (2002) CARD-8 protein, a new CARD family member that regulates caspase-1 activation and apoptosis. *J. Biol. Chem.* 277, 13952-13958.
6. Srinivasula,S.M., Poyet,J.L., Razmara,M., Datta,P., Zhang,Z. and Alnemri,E.S. (2002) The PYRIN-CARD protein ASC is an activating adaptor for caspase-1. *J. Biol. Chem.* 277, 21119-21122.

PRODUCT FROM HYPROMATRIX, INC.**A. AntibodyArray™s:**

1. Signal Transduction AntibodyArray™
Catalog Number HM3000
2. Apoptosis AntibodyArray™
Catalog Number HM4000
3. Cell Cycle AntibodyArray™
Catalog Number HM5000

B. Staining AntibodyArray™s

1. Staining AntibodyArray™ I
Catalog Number HM8100
2. AntibodyArray Staining Apparatus
Catalog Number HM8000

C. Antibodies**1. HRP-conjugated antibodies**

- anti-phosphotyrosine
Catalog Number HM2040
- anti-phosphoserine
Catalog Number HM2070
- anti-phosphothreonine
Catalog Number HM2090

and more...

2. Primary antibodies

Hypromatrix offers a variety of high quality antibodies. For a complete list of antibodies and their specificities, please visit our web site at www.hypromatrix.com.

CONTACT

Hypromatrix, Inc.
100 Barber Avenue
Worcester, MA 01606
USA

Tel: 508-856-7900
Fax: 508-302-0748
Email: contact@hypromatrix.com
Web: www.hypromatrix.com