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CASP5 Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP10944b

Specification

CASP5 Antibody (Center) Blocking peptide - Product Information

Primary Accession P51878

CASP5 Antibody (Center) Blocking peptide - Additional Information

Gene ID 838

Other Names
Caspase-5, CASP-5, ICE(rel)-III, Protease ICH-3, Protease TY, Caspase-5 subunit p20, Caspase-5 subunit p10, CASP5, ICH3

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CASP5 Antibody (Center) Blocking peptide - Protein Information

Name CASP5 {ECO:0000303|PubMed:16893518, ECO:0000312|HGNC:HGNC:1506}

Function
Thiol protease that acts as a mediator of programmed cell death (PubMed:29898893, PubMed:28314590). Initiates pyroptosis, a programmed lytic cell death pathway through cleavage of Gasdermin-D (GSDMD): cleavage releases the N-terminal gasdermin moiety (Gasdermin- D, N-terminal) that binds to membranes and forms pores, triggering pyroptosis (PubMed:29898893). Also mediates cleavage and maturation of IL18 (PubMed:37993714). Cleavage of GSDMD and IL18 is not strictly dependent on the consensus cleavage site but depends on an exosite interface on CASP4 (PubMed:37993714). During non-canonical inflammasome activation, cuts CGAS and may play a role in the regulation of antiviral innate immune activation (PubMed:28314590).

Tissue Location
Expressed in barely detectable amounts in most tissues except brain, highest levels being found in

lung, liver and skeletal muscle.

CASP5 Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

CASP5 Antibody (Center) Blocking peptide - Images

CASP5 Antibody (Center) Blocking peptide - Background

This gene encodes a member of the cysteine-aspartic acidprotease (caspase) family. Sequential activation of caspases playsa central role in the execution-phase of cell apoptosis. Caspasesexist as inactive proenzymes which undergo proteolytic processingat conserved aspartic residues to produce two subunits, large andsmall, that dimerize to form the active enzyme. Overexpression ofthe active form of this enzyme induces apoptosis in fibroblasts.Max, a central component of the Myc/Max/Mad transcriptionregulation network important for cell growth, differentiation, andapoptosis, is cleaved by this protein; this process requiresFas-mediated dephosphorylation of Max. The expression of this geneis regulated by interferon-gamma and lipopolysaccharide.Alternatively spliced transcript variants have been identified forthis gene.

CASP5 Antibody (Center) Blocking peptide - References

Ulybina, Y.M., et al. Exp. Gerontol. 45(9):726-729(2010)Notaridou, M., et al. Int. J. Cancer (2010) In press :Kim, M.S., et al. APMIS 118(4):308-312(2010)Liang, X.S., et al. Br. J. Haematol. 146(4):418-423(2009)Eckhart, L., et al. Biochem. Biophys. Res. Commun. 348(2):682-688(2006)