

CASP1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CASP1.

Catalog # AT1400a

Product Information

Application	WB, IHC, E
Primary Accession	P29466
Other Accession	BC062327
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3D2
Calculated MW	45159

Additional Information

Gene ID	834
Other Names	Caspase-1, CASP-1, Interleukin-1 beta convertase, IL-1BC, Interleukin-1 beta-converting enzyme, ICE, IL-1 beta-converting enzyme, p45, Caspase-1 subunit p20, Caspase-1 subunit p10, CASP1, IL1BC, IL1BCE
Target/Specificity	CASP1 (AAH62327, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CASP1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

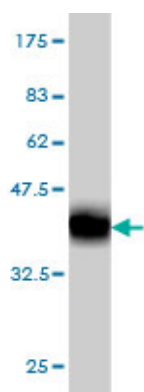
Background

This gene encodes a protein which 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. This gene was identified by its ability to proteolytically cleave and activate the inactive precursor of interleukin-1, a cytokine involved in the processes such as inflammation, septic shock, and wound healing. This gene has been shown to induce cell apoptosis and may function in various developmental stages. Studies of a similar gene in mouse suggest a role in the pathogenesis of Huntington disease. Alternative splicing of this gene results in five transcript variants encoding distinct isoforms.

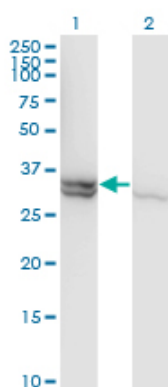
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Interleukin-9 polymorphism in infants with respiratory syncytial virus infection: an opposite effect in boys and girls. Schuurhof A, et al. Pediatr Pulmonol, 2010 Jun. PMID 20503287. Common polymorphisms in ITGA2, PON1 and THBS2 are associated with coronary atherosclerosis in a candidate gene association study of the Chinese Han population. Wang Y, et al. J Hum Genet, 2010 Aug. PMID 20485444. Mutational analysis of caspase genes in prostate carcinomas. Kim MS, et al. APMIS, 2010 Apr. PMID 20402676. Cleavage of sphingosine kinase 2 by caspase-1 provokes its release from apoptotic cells. Weigert A, et al. Blood, 2010 Apr 29. PMID 20197547.

Images

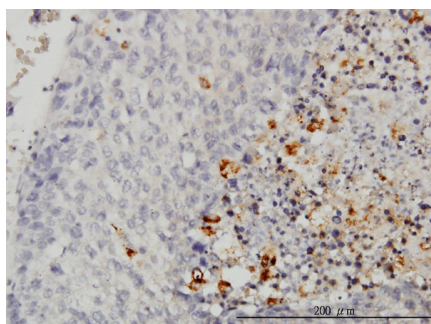


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .



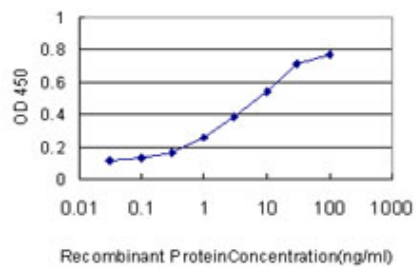
Western Blot analysis of CASP1 expression in transfected 293T cell line by CASP1 monoclonal antibody (M01), clone 3D2.

Lane 1: CASP1 transfected lysate (35 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to CASP1 on formalin-fixed paraffin-embedded human hepatocellular carcinoma. [antibody concentration 3 ug/ml]

Detection limit for recombinant GST tagged CASP1 is approximately 0.1 ng/ml as a capture antibody.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.