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CASP2 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1327c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P42575
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18402
Calculated MW	50685
Antigen Region	198-226

Additional Information

Gene ID	835
Other Names	Caspase-2, CASP-2, Neural precursor cell expressed developmentally down-regulated protein 2, NEDD-2, Protease ICH-1, Caspase-2 subunit p18, Caspase-2 subunit p13, Caspase-2 subunit p12, CASP2, ICH1, NEDD2
Target/Specificity	This CASP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 198-226 amino acids from the Central region of human CASP2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CASP2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CASP2
Synonyms	ICH1, NEDD2

Function	Is a regulator of the cascade of caspases responsible for apoptosis execution (PubMed:11156409, PubMed:15073321, PubMed:8087842). Might function by either activating some proteins required for cell death or inactivating proteins necessary for cell survival (PubMed:15073321). Associates with PIDD1 and CRADD to form the PIDDosome, a complex that activates CASP2 and triggers apoptosis in response to genotoxic stress (PubMed:15073321).
Tissue Location	Expressed at higher levels in the embryonic lung, liver and kidney than in the heart and brain. In adults, higher level expression is seen in the placenta, lung, kidney, and pancreas than in the heart, brain, liver and skeletal muscle

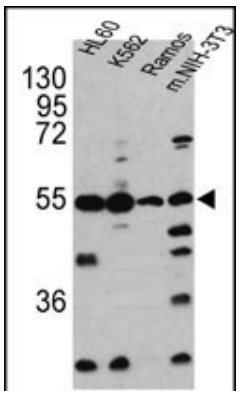
Background

CASP2 is 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. The protein exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. The proteolytic cleavage of this protein is induced by a variety of apoptotic stimuli.

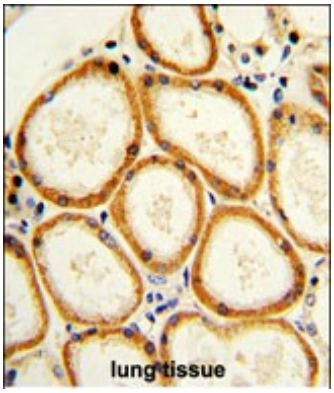
References

Lan,Q., Morton,L.M. Blood (2009) In press
Shi,M., Vivian,C.J. Cell 136 (3), 508-520 (2009)
Paroni,G., Henderson,C. J. Biol. Chem. 276 (24), 21907-21915 (2001)
Tiso,N., Pallavicini,A. Biochem. Biophys. Res. Commun. 225 (3), 983-989 (1996)

Images

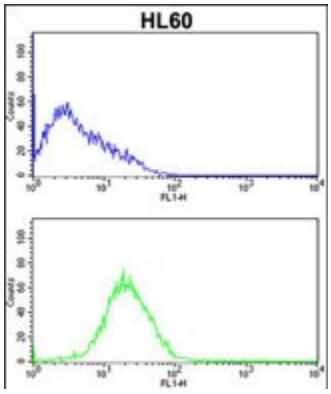


Western blot analysis of CASP2 antibody (Center) (Cat. #AP1327c) in HL60, K562, Ramos and NIH-3T3 cell line lysates(35ug/lane). CASP2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human lung with CASP2 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CASP2 Antibody (Center) (Cat. #AP1327c) flow cytometric analysis of HL60 cells (bottom histogram) compared to a



negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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