



Rabbit Anti-Human Cleaved Caspase-1 (Asp297) monoclonal antibody, clone 5200 (CABT-L1906)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Cleaved Caspase-1 (Asp297) rabbit monoclonal antibody detects endogenous levels of the p20 subunit of human caspase-1 only upon cleavage at Asp297.
Target	Cleaved Caspase-1 (Asp297)
Immunogen	Synthetic peptide corresponding to residues adjacent to Asp297 of human caspase-1.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Monkey
Clone	5200
Conjugate	Unconjugated
Applications	WB, IP
Molecular Weight	22kDa
Format	Liquid
Concentration	Lot specific
Size	100 µl
Buffer	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol

Preservative 0.02% Sodium Azide

Storage -20°C. Avoid Freeze/Thaw Cycles. Do not aliquot the antibody.

BACKGROUND

Introduction

Caspase-1, or interleukin-1 β converting enzyme (ICE/ICE α), is a class I cysteine protease, which also includes caspases -4, -5, -11, and -12. Caspase-1 cleaves inflammatory cytokines such as pro-IL-1 β and interferon- γ inducing factor (IL-18) into their mature forms. Like other caspases, caspase-1 is proteolytically activated from a proenzyme to produce a tetramer of its two active subunits, p20 and p10. Caspase-1 has a large amino-terminal pro-domain that contains a caspase recruitment domain (CARD). Overexpression of caspase-1 can induce apoptosis. Mice deficient in caspase-1, however, have no overt defects in apoptosis but do have defects in the maturation of pro-IL-1 β and are resistant to endotoxic shock. At least six caspase-1 isoforms have been identified, including caspase-1 α , β , γ , δ , ϵ and ζ . Most caspase-1 isoforms (α , β , γ and δ) produce products between 30-48 kDa and induce apoptosis upon over-expression. Caspase-1 ϵ typically contains only the p10 subunit, does not induce apoptosis and may act as a dominant negative. The widely expressed ζ isoform of caspase-1 induces apoptosis and lacks 39 amino-terminal residues found in the α isoform. Activation of caspase-1 occurs through an oligomerization molecular platform designated the "inflammasome" that includes caspase-5, Pycard/Asc, and NALP1.

Keywords

CASP1; caspase 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase); caspase 1, apoptosis related cysteine protease (interleukin 1, beta, convertase) , IL1BC; caspase-1; caspase 1; ICE; Caspase 1

GENE INFORMATION

Entrez Gene ID [834](#)

UniProt ID [P29466](#)