



E90964

CASP1 Polyclonal Antibody

Catalog Number: E90964

Amount: 100ul

Background: 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 (1,2). 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 (3). 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 (4,5). At least six caspase-1 isoforms have been identified, including caspase-1 α , β , γ , δ , ϵ and ζ (6). 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 (6). Activation of caspase-1 occurs through an oligomerization molecular platform designated the "inflammasome" that includes caspase-5, Pycard/Asc, and NALP1 (7).

Species: Rabbit

Isotype: IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: CASP1;ICE;IL1BC;P45 ;Caspase-1

Immunogen: Recombinant protein of human CASP1

Purification: Affinity purification

Reactivity: H M R

Applications: WB IHC

Molecular Weight: 45kDa

Swiss-Prot No. : P29466

Gene ID: 834

References: 1. Thornberry, N.A. et al. (1992) Nature 356, 768-74. 2. Martinon, F. and Tschopp, J. (2004) Cell 117, 561-74. 3. Miura, M. et al. (1993) Cell 75, 653-60. 4. Kuida, K. et al. (1995) Science 267, 2000-3. 5. Li, P. et al. (1995) Cell 80, 401-11. 6. Feng, Q. et al. (2004) Genomics 84, 587-91. 7. Martinon, F. et al. (2002) Mol Cell 10, 417-26.

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