

#12703 Store at -20C

IL-1 β (D3U3E) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, W-S, IF-IC, FC-FP	H	Endogenous	17, 31	Rabbit IgG	#P01584	3553

Product Usage Information

Application

Western Blotting
Simple Western™
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:10 - 1:50
1:200 - 1:800
1:100 - 1:400

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #18689.

Specificity / Sensitivity

IL-1 β (D3U3E) Rabbit mAb recognizes endogenous levels of total IL-1 β protein. This antibody is not observed to detect endogenous levels of mature IL-1 β . It can detect up to 100 pg of recombinant mature IL-1 β .

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant human IL-1 β protein.

Background

Interleukin-1 β (IL-1 β), one of the major caspase-1 targets, is a multifunctional cytokine that is involved in a host of immune and proinflammatory responses (1). It is produced primarily by activated monocytes and macrophages. It signals through various adaptor proteins and kinases that lead to activation of numerous downstream targets (2-6). Human IL-1 β is synthesized as a 31 kDa precursor. To gain activity, the precursor must be cleaved by caspase-1 between Asp116 and Ala117 to yield a 17 kDa mature form (7,8). Detection of the 17 kDa mature form of IL-1 β is a good indicator of caspase-1 activity.

Background References

1. Dinarello, C.A. (1998) *Int Rev Immunol* 16, 457-99.
2. Burns, K. et al. (1998) *J Biol Chem* 273, 12203-9.
3. Cao, Z. et al. (1996) *Nature* 383, 443-6.
4. Cao, Z. et al. (1996) *Science* 271, 1128-31.
5. Wesche, H. et al. (1997) *Immunity* 7, 837-47.
6. Ninomiya-Tsuji, J. et al. (1999) *Nature* 398, 252-6.
7. Thornberry, N.A. et al. (1992) *Nature* 356, 768-74.
8. Cerretti, D.P. et al. (1992) *Science* 256, 97-100.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **W-S:** Simple Western™ **IF-IC:** Immunofluorescence (Immunocytochemistry)
FC-FP: Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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