Revision 1

Store at -20C

#2021

Cleaved IL-1β (Asp116) Antibody

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355)
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Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Endogenous	17	Rabbit	#P01584	3553

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Cleaved IL-1beta (Asp116) Antibody detects endogenous levels of the 17 kDa processed form of IL-1beta. The antibody does not recognize the uncleaved precursor of IL-1beta.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the amino-terminal sequence of the 17 kDa mature form of human IL-1beta. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Interleukin-1β (IL-1β), 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-1β 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-1β 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.
9. Grahames, C.B. et al. (1999) *Br J Pharmacol* 127, 1915-21.

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

W: Western Blotting

Cross-Reactivity Key

H: Human

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Limited Uses

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