



DyLight 488 Ovine IL-1 β Polyclonal Antibody

Antigen-affinity purified Rabbit anti-ovine IL-1 β antibody

Catalog Number: GR203003

Background

Interleukin-1 beta (IL-1 β) also known as catabolin, is a member of the interleukin 1 cytokine family. IL-1 β precursor is cleaved by caspase 1 (interleukin 1 beta convertase). Cytosolic thiol protease cleaves the product to form mature IL-1 β . Interleukin-1 alpha and interleukin-1 beta forms IL-1 (1,2,3).

IL-1 β is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. IL-1 β gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2.

References

1. Auron PE, et al (1984). Proc Natl Acad Sci U S A 81 (24): 7907–11.
2. March CJ, et al. (1985). Nature 315 (6021): 641–7.
3. Clark BD, et al (1986). Nucleic Acids Res 14 (20): 7897–1914.



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Description

Size: 50 μ g

Species reactivity: Ovine, bovine

Specificity: Detects ovine IL-1 β in immunoassays and Western blots.

Source: Polyclonal Rabbit IgG

Purification: Antigen-affinity purified

Immunogen: *E. coli* derived recombinant ovine IL-1 β , Ala114-Pro267, and Accession # NP_001009465.2

Endotoxin Level: < 0.20 EU per 1 μ g of the antibody by the LAL method.

Conjugate: DyLight 488

Formulation: Lyophilized from PBS with 5% Trehalose.

Application

Recommended concentration:

Western blot: 0.2-0.5 μ g/ml

Immunocytochemistry: 5-15 μ g/ml

ELISA: 0.3-1 μ g/ml

Neutralization: Measured by its ability to neutralize IL-1 β induced proliferation in the D10.G4.1 mouse cell line. The Neutralization Dose (ND₅₀) is typically 0.1-0.3 μ g/mL in the presence of 100 pg/mL recombinant ovine IL-1 β .

Preparation, Stability & Storage

Reconstitution: reconstitute at 0.2 mg/ml in sterile and 0.05% azide.

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, at -20°C to -70°C, as supplied.
- 6 months from date of receipt, at -20°C to -70°C, reconstituted.

15/12/2011

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NOT FOR USE IN HUMANS.**