



Interleukin 1 beta (IL1b, IL-1 beta, Catabolin, Hematopoietin 1, H1, IFN beta Inducing Factor, IL1F2, LAF, OAF, Osteoclast Activating Factor, Preinterleukin beta, Pro Interleukin 1 beta)

Catalog number

I7663-24V5

Supplier

United States Biological

Interleukin 1 (IL-1) activates T cells and lymphocytes, which then proliferate and secrete interleukin 2. IL-1 is primarily released from stimulated macrophages and monocytes, but also is released from several other cell types, and is thought to play a key role in inflammatory and immune responses. The two closely related agents, interleukin1 alpha (IL-1 alpha) and interleukin1 beta (IL-1 beta) bind to the same cell surface receptor, elicit nearly identical biological responses and share 25% homology in their amino acid sequence.

Applications

Suitable for use in ELISA, Western Blot, Flow Cytometry, Immunocytochemistry, and Neutralization. Other applications not tested.

Recommended Dilutions

Western Blot: 1ug/ml using THP-1 human acute monocytic leukemia cell line treated with PMA and LPS

Flow Cytometry: 2.5ug/10(6) cells. Using human peripheral blood mononuclear cells treated with LPS, fixed with paraformaldehyde and permeabilized with saponin.

Immunocytochemistry: 8-25ug/ml using immersion fixed human peripheral blood mononuclear cells stimulated with LPS or with LPS and monensin.

Neutralization: Measured by its ability to neutralize IL1beta/IL1F2 induced proliferation in the D10.G4.1 mouse helper T cell line. The Neutralization Dose (ND50) is typically 0.0010.003ug/ml in the presence of 50pg/ml recombinant Human IL-1beta/IL-1F2 and 1.25ug/ml concanavalin A. Optimal dilutions to be determined by the researcher.

Storage and Stability

May be stored at 4°C for short-term only. Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 12 months after receipt. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.

Immunogen

Recombinant protein corresponding to human Interleukin 1 beta expressed in E. coli. Cellular Localization: Secreted.

Formulation

Supplied as a liquid in PBS, pH 7.4, 5% trehalose

Purity



Purified by Protein G affinity chromatography from tissue culture supernatant

Specificity

Recognizes human Interleukin 1 beta at ~31kD. Shows <5% crossreactivity with recombinant mouse and porcine IL-1 beta. Does not crossreact with recombinant mouse IL-1 alpha, recombinant human IL-1 alpha, or recombinant rat IL-1 beta.

Product Type

Mab

Source

human

Isotype

IgG1

Grade

Affinity Purified

Applications

E FC IC N WB

Crossreactivity

Hu

Storage

-20°C

Reference

1. Durum SK et al. Interleukin 1: an immunological perspective. Annu Rev Immunol 3:263-87 (1985).
2. Revised nomenclature for antigen-nonspecific T cell proliferation and helper factors. J Immunol 123:2928-9 (1979).
3. Gery I et al. Potentiation of the T-lymphocyte response to mitogens. I. The responding cell. J Exp Med 136:128-42 (1972).