Human IL-1β/IL-1F2 Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF201

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-1β/IL-1F2 in ELISAs and Western blots. In sandwich immunoassays, less than 4% cross-reactivity with recombinant rat IL-1β is observed and less than 0.1% cross-reactivity with recombinant mouse IL-1β and recombinant porcine IL-1β is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human IL-1β/IL-1F2 Ala117-Ser269 Accession # NP_000567
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

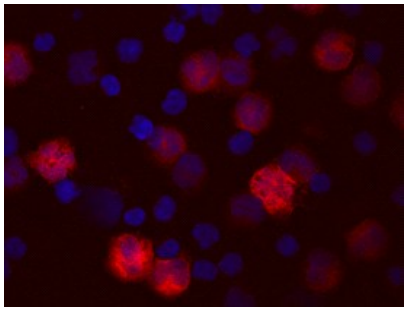
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human IL-1β/IL-1F2 (Catalog # 201-LB)
Immunocytochemistry	5-15 µg/mL	See Below
Human IL-1β/IL-1F2 Sandwich Immunoassay		**Reagent**
ELISA Capture	2-8 µg/mL	Human IL-1β/IL-1F2 Antibody (Catalog # MAB601)
ELISA Capture	2-8 µg/mL	Human IL-1β/IL-1F2 Antibody (Catalog # MAB601R)
ELISA Detection	0.1-0.4 µg/mL	Human IL-1β/IL-1F2 Biotinylated Antibody (Catalog # BAF201)
Standard		Recombinant Human IL-1β/IL-1F2 (Catalog # 201-LB)

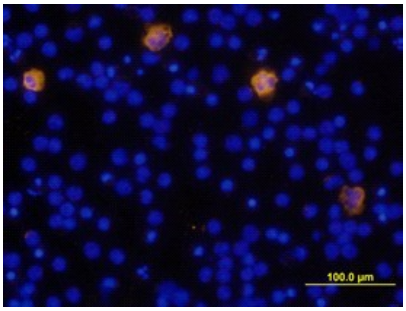
DATA

Immunocytochemistry



IL-1β/IL-1F2 in Human PBMCs. IL-1β/IL-1F2 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Human IL-1β/IL-1F2 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF201) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Streptavidin (red; Catalog # NL999) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

Immunocytochemistry



IL-1β/IL-1F2 in Human PBMCs. IL-1β/IL-1F2 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) using Human IL-1β/IL-1F2 Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF201) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Non-adherent Cells.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

IL-1 is a name that designates two pleiotropic cytokines, IL-1α (IL-1F1) and IL-1β (IL-1F2), which are the products of distinct genes. IL-1α and IL-1β are structurally related polypeptides that share approximately 21% amino acid (aa) identity in human. Both proteins are produced by a wide variety of cells in response to inflammatory agents, infections, or microbial endotoxins. While IL-1α and IL-1β are regulated independently, they bind to the same receptor and exert identical biological effects. IL-1 RI binds directly to IL-1α or IL-1β and then associates with IL-1 R accessory protein (IL-1 R3/IL-1 R AcP) to form a high-affinity receptor complex that is competent for signal transduction. IL-1 RII has high affinity for IL-1β but functions as a decoy receptor and negative regulator of IL-1β activity. IL-1ra functions as a competitive antagonist by preventing IL-1α and IL-1β from interacting with IL-1 RI. The human IL-1β cDNA encodes a 269 aa precursor. A 116 aa propeptide is cleaved intracellularly by the cysteine protease IL-1β-converting enzyme (Caspase-1/ICE) to generate the active cytokine. The 17 kDa mature human IL-1β shares 96% aa sequence identity with rhesus and 67-78% with canine, cotton rat, equine, feline, mouse, porcine, and rat IL-1β.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956