

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-36β/IL-1F8 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) IL-1α, rhIL-1β, rhIL-1ra, rhIL-18, rhIL-36Ra, rhIL-36α, rhIL-1F7 or recombinant mouse IL-36β is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 162601
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IL-36β/IL-1F8 Met1-Glu157 Accession # NP_775270
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Human interleukin 1 family member #8 [IL-1F8; also named IL-36β FIL-1η (eta) and IL-1H2] is a member of the IL-1 family of proteins (1-3, 6). IL-1 family members include IL-1β, IL-1α, IL-1ra, IL-18 and IL-1F5 through F10 (4). All family members show a 12 β-stranded β-trefoil configuration, and are believed to have arisen from a common ancestral gene that has undergone multiple duplications (4). Two alternatively spliced transcript variants encode distinct (164 or 157 residues) protein isoforms that differ in their C-terminal 70 amino acid (aa) residues have been reported (3). IL-36β isoform 2 is synthesized as a 157 aa protein that contains no signal sequence and no prosegment (1-2). Unlike IL-36β isoform 1 which lacks potential N-linked glycosylation sites, isoform 2 contains one potential N-linked glycosylation site in its unique C-terminus. IL-36β is reported to be actively secreted (1). Human IL-36β isoform 2 shares 61% aa identity with mouse IL-1 ra, a 183 aa form of IL-36β. Within the IL-1 family, IL-36β shares 30%, 32%, 37%, 46%, 34%, 45% and 28% aa sequence identity with IL-1 ra, IL-1β, IL-36Ra, IL-36α, F7, IL-36γ and F10, respectively. Cells reported to express IL-36β include resting and activated monocytes and B cells (1, 4). The receptor for IL-36β is reported to be a combination of IL-1 Rrp2 and IL-1 RAcP (5). Recombinant IL-36β, along with IL-36α and IL-36γ, has been shown to activate the pathway involving NF-κB and MAPK in an IL-1 Rrp2 dependent manner.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.