

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-36 α /IL-1F6 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human (rh) IL-1F5, rhIL-1F6, and rhIL-1F9 is observed, and less than 2% cross-reactivity with
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-36 α /IL-1F6 Met1-His160 Accession # Q9JLA2
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.
Blockade of Receptor-ligand Interaction	Optimal dilution of this antibody should be experimentally determined.
ELISA	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

Mouse interleukin-36 alpha [IL-36 α ; also named interleukin 1 family member 6, IL-1F6 and FIL-1 ϵ (epsilon)] is a member of the IL-1 family of proteins (1-3). IL-1 family members include IL-1 β , IL-1 α , IL-1ra, IL-18 and IL-1F5 through F10 (4). All family members show a 12 β -strand, β -trefoil configuration, and all family members are believed to have arisen from a common ancestral gene that has undergone multiple duplications (4). IL-1F6 is synthesized as a 160 amino acid (aa) protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation site(s) (2, 5). It appears to be actively secreted (1). When found in cell lysates, it presents as an 18 kDa monomer (2). Mouse to human, full length IL-1F6 has 54% aa identity. Within the family, IL-1F6 is 29% aa identical to IL-1ra, and 32%, 32%, 34%, 41%, and 28% aa identical to IL-1 β , IL-1F5, F8, F9, and F10, respectively. Cells reported to express IL-1F6 include monocytes, B cells and T cells (1, 4). Notably, IL-1F6 is the only novel IL-1 family member found to be expressed on T-cells. The receptor for IL-1F6 is reported to be a combination of IL-1 Rrp2 and IL-1 RAcP (6). Recombinant IL-1F6, along with IL-1F8 and IL-1F9, has been shown to act as an agonist by activating the pathway involving NF- κ B and MAPK in an IL-1 Rrp2 dependent manner. This suggests that IL-1F6 may signal in similar fashion to IL-1 and IL-18 in having a binding receptor which upon ligation, recruits a second receptor as a signaling component, forming an active heterodimeric receptor complex.

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.