

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-36 α /IL-1F6 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) IL-1 α , rhIL-1 β , rhIL-1 receptor antagonist, rhIL-18, rhIL-36Ra, rhIL-36 β or recombinant mouse IL-36 α is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 162122
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IL-36 α /IL-1F6 Met1-Phe158 Accession # Q9UHA7
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 #6 [IL-1F6; also IL-36 α and IL-1 ϵ (epsilon)] is a member of the IL-1 family of proteins (1-3, 6). 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-36 α is synthesized as a 158 amino acid (aa) protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation site(s) (1-3). It appears to be actively secreted (1). When found in cell lysate, it presents as an 18 kDa monomer (2). Human to mouse, full length IL-36 α has 54% aa identity. Within the family, IL-36 α is 30% aa identical to IL-1ra, and 27%, 31%, 36%, 46%, 57% and 28% aa identical to IL-1 β , IL-36Ra, IL-1F7, IL-36 β , IL-36 γ , and IL-1F10, respectively. Cells reported to express IL-36 α include monocytes, B cells and T cells (1, 4). Notably, IL-36 α is the only novel IL-1 family member found to be expressed on T-cells. The receptor for IL-36 α is reported to be a combination of IL-1 Rrp2 and IL-1 RAcP (5). Recombinant IL-36 α , along with IL-36 β and IL-36 γ , 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-36 α may signal in a 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

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