

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | 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.               |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 162601                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human IL-36β/IL-1F8<br>Met1-Glu157<br>Accession # NP_775270                                                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | 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

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