

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse IL-36 $\beta$ /IL-1F8 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) IL-1F8 is observed.                                                                                                     |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant mouse IL-36 $\beta$ /IL-1F8<br>Met1-Lys183<br>Accession # Q9D6Z6                                                                                                                                                                        |
| <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.

|                                                |                                                                        |
|------------------------------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>                            | Optimal dilution of this antibody should be experimentally determined. |
| <b>Blockade of Receptor-ligand Interaction</b> | 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

Mouse interleukin-36 beta [IL-36 $\beta$ ; also named IL-1F8, interleukin 1 family member 8, FIL-1 $\eta$  (eta) and IL-1H2] is a member of the IL-1 family of proteins (1-3). IL-1 family members include IL-1 $\beta$ , IL-1 $\alpha$ , IL-1ra, IL-18 and IL-1F5 through F10 (4). All family members show a 12  $\beta$ -stranded  $\beta$ -trefoil configuration, and are believed to have arisen from a common ancestral gene that has undergone multiple duplications (4). Although two alternatively spliced transcript variants for human IL-1F8 have been described, to date, only one mouse IL-1F8 isoform is known (3). Mouse IL-1F8 is synthesized as a 183 amino acid (aa) protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation site(s) (1, 2). It is likely that mouse IL-1F8, similarly to its human homologue, is actively secreted (1). Mouse IL-1F8 shares 61% and 74% aa identity with human IL-1F8 isoform 2 and rat IL-1F8, respectively. Within the IL-1 family, IL-1F8 shares 27% sequence with 33%, 32%, 35%, 39% and 28% aa sequence identity with IL-1 ra, IL-1 $\beta$ , IL-1F5, F6, F9 and F10, respectively. Cells reported to express IL-1F8 include resting and activated monocytes and B cells (1, 4). The receptor for IL-1F8 is reported to be a combination of IL-1 Rrp2 and IL-1 RAcP (5). Recombinant IL-1F8, along with IL-1F6 and IL-1F9, has been shown to activate the pathway involving NF- $\kappa$ B and MAPK in an IL-1Rrp2 dependent manner.

## PRODUCT SPECIFIC NOTICES

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