

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human IL-36γ/IL-1F9 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human (rh) IL-36α is observed, approximately 5% cross-reactivity with rhIL-37 is observed, and less than 1% cross-re                  |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human IL-36γ/IL-1F9 (R&D Systems, Catalog # 2320-IL)<br>Met1-Asp169<br>Accession # Q9NZH8                                                                                                                                               |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 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.

**Blockade of Receptor-ligand Interaction** 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 #9 [IL-1F9; also named Interleukin-36 gamma, IL36G, IL-1ε (epsilon) and IL-1H1] is a member of the IL-1 family, which includes IL-1β, IL-1α, IL-1ra, IL-18 and IL-1F5 through F10 (1-4). All family members show a 12 β-strand, β-trefoil configuration, and are believed to have arisen from a common ancestral gene that has undergone multiple duplications (4). IL-1F9 is synthesized as a 19 kDa, 169 amino acid (aa) protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation site (1, 2, 5). The molecule is secreted when transfected into 293-T cells (5). Human to mouse, IL-1F9 has 53% aa sequence identity. Within the family, IL-1F9 shares 30%, 23%, 33%, 57%, 35%, 45%, and 32% aa sequence identity with IL-1 ra, IL-1β, IL-1F5, F6, F7, F8, and F10, respectively. Cells reported to express IL-1F9 include Langerhans cells, keratinocytes/stratified squamous epithelium, plus Chief cells and Parietal cells of the stomach (4, 5). The receptor for IL-1F9 is reported to be a combination of IL-1 Rrp2 and IL-1 RAcP (6). Recombinant IL-1F9, along with IL-1F8 and IL-1F6, 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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