

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-36γ/IL-1F9 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant human (rh) IL-1α, rhIL-1β, rhIL-36Ra/IL-1F5, rhIL-36α/IL-1F6, rhIL-1F7, rhIL-36β/IL-1F8, rhIL-1ra/IL-1F3, or rhIL-18/IL-1F4 is
Source	Monoclonal Rat IgG _{2A} Clone # 278706
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IL-36γ/IL-1F9 Met1-Asp169 Accession # Q9NZH8
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.

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

Interleukin-36 gamma (IL-36γ) [also named IL-1F9, 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-36γ 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 293T cells (5). Human to mouse, IL-36γ has 53% aa sequence identity. Within the family, IL-36γ 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-36γ include Langerhans cells, keratinocytes/stratified squamous epithelium, plus chief cells and parietal cells of the stomach (4, 5). The receptor for IL-36γ is reported to be a combination of IL-1 Rrp2 and IL-1 RAcP (6). Recombinant IL-36γ, along with IL-36β/IL-1F8 and IL-36α/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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