

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-36Ra/IL-1F5 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant human IL-36Ra and recombinant mouse IL-1ra is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 759207
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-36Ra/IL-1F5 Met1-Cys155 Accession # Q9QYY1
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

Mouse interleukin-36 receptor antagonist (IL-36Ra; previously IL-1F5; also named FIL-1δ [delta], IL-1HY1, IL-1H3, and IL-1L1) is a member of the IL-1 family of proteins (1-6). IL-1 family members include IL-1β, IL-1α, IL-1ra, IL-18 and IL-1F5 through F10 (6, 7). All family members show a 12 β-strand, β-trefoil configuration, and are believed to have arisen from a common ancestral gene that underwent multiple duplications (8). The mouse IL-36Ra/IL-1F5 gene maps to a region on mouse chromosome 2 that contains all other IL-1 family members (except IL-18), supporting an evolutionary relationship with the IL-1 family (1, 9). It is particularly close to the gene for IL-1ra and is likely a relatively recent duplication of that gene. IL-36Ra/IL-1F5 is synthesized as a 156 amino acid (aa) protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation site(s) (2, 5, 8). Nevertheless, it appears to be secreted as a 17 kDa monomer. In humans, there is an alternate start site that potentially gives rise to an alternate splice form (5). This translated product has a premature stop codon, resulting in a truncated 16 aa peptide. Mouse to human, full length IL-36Ra/IL-1F5 has 90% aa identity. Within the family, IL-36Ra/IL-1F5 is 48%, 30%, 35%, 35%, 35%, 37% and 43% aa identical to IL-1ra, IL-1β, IL-36α/IL-1F6, IL-37/IL-1F7, IL-36β/IL-1F8, IL-36γ/IL-1F9 and IL-1F10, respectively. Cells reported to express IL-36Ra/IL-1F5 include monocytes, B cells, dendritic cells/Langerhans cells, keratinocytes, and gastric fundus Parietal and Chief cells (1, 8). Indirect evidence suggests the receptor for IL-36Ra/IL-1F5 is IL-1 Rrp2 and/or IL-1 RAcP (9). IL-36Ra/IL-1F5 was initially reported to be an antagonist of IL-36γ activity (4, 7). This would be consistent with its hypothesized relationship to IL-1ra.

PRODUCT SPECIFIC NOTICES

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