

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-36Ra/IL-1F5 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) IL-1ra is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human IL-36Ra/IL-1F5 Val2-Asp155 Accession # Q9UBH0
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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

Human Interleukin-36 receptor antagonist protein [IL36Ra; also named interleukin 1 family member 5, IL-1F5, FIL-1δ (delta), IL36RN, 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-F10 (6, 7). All family members show a 12 β-strand, β-trefoil configuration, and all family members are believed to have arisen from a common ancestral gene that underwent multiple duplications (7). The human IL-1F5 gene is in closest proximity to the gene for IL-1ra and is likely a relatively recent duplication of the IL-1ra gene (2, 3). IL-1F5 is synthesized as a 155 amino acid (aa) protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation site(s) (2-5). Nevertheless, it appears to be secreted as a 17 kDa monomer (5). There is an alternate start site that potentially gives rise to an alternate splice form (5). The translated product, however, has a premature stop codon, resulting in a truncated 16 aa peptide. Human to mouse, full length IL-1F5 has 90% aa identity. Within the family, IL-1F5 is 50% aa identical to IL-1ra, and 32%, 31%, 35%, 37%, 32% and 42% aa identical to IL-1β, IL-1F6, F7, F8, F9 and F10, respectively. Cells reported to express IL-1F5 include monocytes, B cells, dendritic cells/Langerhans cells, keratinocytes, and gastric fundus Parietal and Chief cells (1, 8). The receptor for IL-1F5 has not been positively identified. Indirect evidence suggests it is IL-1 Rrp2 and/or IL-1 RAcP (9). In either case, activity association with receptor binding is also unclear. It was initially reported to be an antagonist of IL-1F9 activity (4, 7). This would be consistent with its hypothesized relationship to IL-1ra. Studies, however, find IL-1F5 antagonist activity difficult to demonstrate (9).

PRODUCT SPECIFIC NOTICES

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