

DESCRIPTION

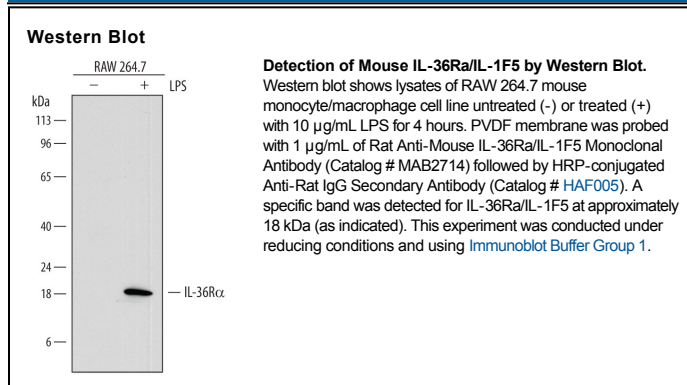
Species Reactivity	Mouse
Specificity	Detects mouse IL-36Ra/IL-1F5 in direct ELISAs. In direct ELISAs, 100% cross-reactivity with recombinant human IL-36Ra and recombinant mouse IL-1ra is observed.
Source	Monoclonal Rat IgG _{2B} Clone # 759207
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-36Ra/IL-1F5 Met1-Cys155 Accession # Q9QYY1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Mouse interleukin-36 receptor antagonist (IL-36Ra; previously IL-1F5; also named FIL-1 δ [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-1 β , IL-1 α , 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-1 β , IL-36 α /IL-1F6, IL-37/IL-1F7, IL-36 β /IL-1F8, IL-36 γ /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-36 γ activity (4, 7). This would be consistent with its hypothesized relationship to IL-1ra.

References:

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