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IL-36RN Antibody
Catalog # ASC11713

Specification

IL-36RN Antibody - Product Information

Application	**WB, IHC, IF**
Primary Accession	Q9UBH0
Other Accession	NP_775262, 27894310
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 17 kDa** **Observed: 27 kDa KDa**
Application Notes	**IL-36RN antibody can be used for detection of IL-36RN by Western blot at 1 - 2 µg/ml.**

IL-36RN Antibody - Additional Information

Gene ID	**26525**

Target/Specificity
IL36RN; IL-36RN antibody is human specific. At least two isoforms of IL-36RN are known to exist

Reconstitution & Storage
IL-36RN antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
IL-36RN Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IL-36RN Antibody - Protein Information

Name IL36RN (HGNC:15561)

Function
Inhibits the activity of interleukin-36 (IL36A,IL36B and IL36G) by binding to receptor IL1RL2 and preventing its association with the coreceptor IL1RAP for signaling. Part of the IL-36 signaling system that is thought to be present in epithelial barriers and to take part in local inflammatory response; similar to the IL-1 system with which it shares the coreceptor. Proposed to play a role in skin inflammation. May be involved in the innate immune response to fungal pathogens, such as Aspergillus fumigatus. May activate an anti- inflammatory signaling pathway by recruiting SIGIRR.

Cellular Location
Cytoplasm. Secreted. Note=The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and secretion.

Tissue Location

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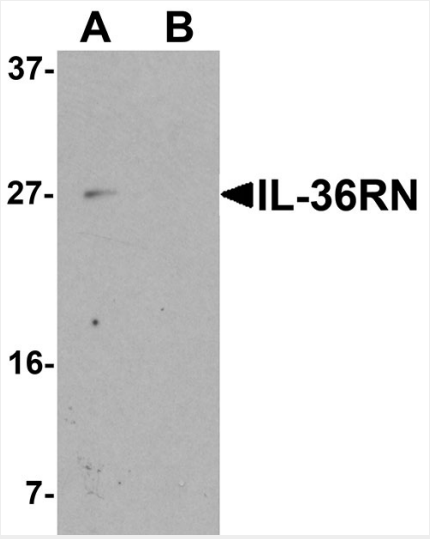
Predominantly expressed in skin keratinocytes but not in fibroblasts, endothelial cells or melanocytes. Detected also in the spleen, brain leukocyte and macrophage cell types. Increased in lesional psoriasis skin.

IL-36RN Antibody - Protocols

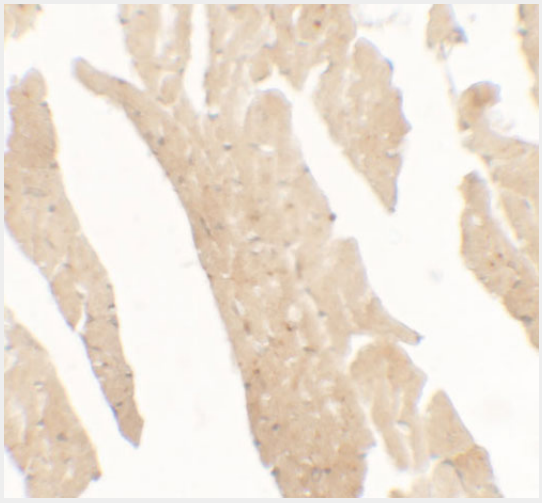
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL-36RN Antibody - Images



Western blot analysis of IL-36RN in 3T3 cell lysate with IL-36RN antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



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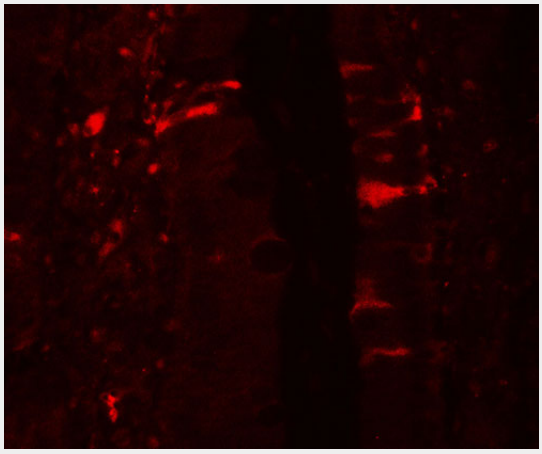
Immunohistochemistry of IL-36RN in rat small intestine tissue with IL-36RN antibody at 5 µg/mL.



Immunofluorescence of IL-36RN in rat small intestine tissue with IL-36RN antibody at 20 µg/mL.

IL-36RN Antibody - Background

IL-36RN is is a member of the interleukin 1 cytokine family whose gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2 (1). IL-36RN specifically inhibits the activation of NF-kappaB induced IL-36A (2). The opposing activities of these cytokines have been suggested to be involved in the regulation of skin inflammation (3). Like the IL-36 cytokines (IL-36A, IL-36B and IL-36G), IL-36RN requires post-translational processing for full agonist activity, but the cleavage mechanism is currently unknown (4).

IL-36RN Antibody - References

Smith DE, Renshaw BR, Ketchem RR, et al. Four new members expand the interleukin-1 superfamily. J. Biol. Chem. 2000; 275:1169-75.
Debets R, Timans JC, Homey B, et al. Two novel IL-1 family members, IL-1 delta and IL-1 epsilon, function as an antagonist and agonist of NF-kappa B activation through the orphan IL-1 receptor-related protein 2. J. Immunol. 2001; 167:1440-6.
Blumberg H, Dinh H, Trueblood ES, et al. Opposing activities of two novel members of the IL-1 ligand family regulate skin inflammation. J. Exp. Med. 2007; 204:2603-14.
Towne JE, Renshaw BR, Douangpanya J, et al. Interleukin-36 (IL-36) ligands require processing for full agonist agonist (IL-36a, IL-36b, and IL-36g) or antagonist (IL-36Ra) activity. J. Biol. Chem. 2011; 286:42594-602.