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IL-36G Antibody
Catalog # ASC11712

Specification

IL-36G Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q9NZH8
Other Accession	NP_062564, 9665234
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 19 kDa** **Observed: 22 kDa KDa**
Application Notes	**IL-36G antibody can be used for detection of IL-36G by Western blot at 1 - 2 µg/ml.**

IL-36G Antibody - Additional Information

Gene ID **56300**

Target/Specificity
IL36G; IL-36G antibody is human specific. IL-36G antibody will not cross-react with IL-36A or IL-36B.

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

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

IL-36G Antibody - Protein Information

Name IL36G (HGNC:15741)

Function
Cytokine that binds to and signals through the IL1RL2/IL-36R receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells. 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 IL1RAP. Seems to be involved in skin inflammatory response by acting on keratinocytes, dendritic cells and indirectly on T-cells to drive tissue infiltration, cell maturation and cell proliferation. In cultured keratinocytes induces the expression of macrophage, T-cell, and neutrophil chemokines, such as CCL3, CCL4, CCL5, CCL2, CCL17, CCL22, CL20, CCL5, CCL2, CCL17, CCL22, CXCL8, CCL20 and CXCL1; also stimulates its own expression and that of the prototypic cutaneous pro-inflammatory parameters TNF-alpha, S100A7/psoriasin and inducible NOS. May play a role in pro-inflammatory responses during particular neutrophilic airway inflammation: activates mitogen-activated protein kinases and NF-kappa B in primary lung fibroblasts, and stimulates the expression of IL-8 and CXCL3 and Th17

chemokine CCL20 in lung fibroblasts. May be involved in the innate immune response to fungal pathogens, such as Aspergillus fumigatus.

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.

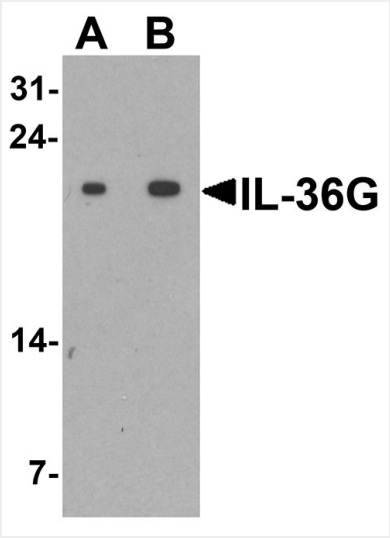
Tissue Location
Highly expressed in tissues containing epithelial cells: skin, lung, stomach and esophagus. Expressed in bronchial epithelial. In skin is expressed only in keratinocytes but not in fibroblasts, endothelial cells or melanocytes. Up-regulated in lesional psoriasis skin. Expressed in monocyte-derived dendritic cells and M1 macrophages.

IL-36G Antibody - Protocols

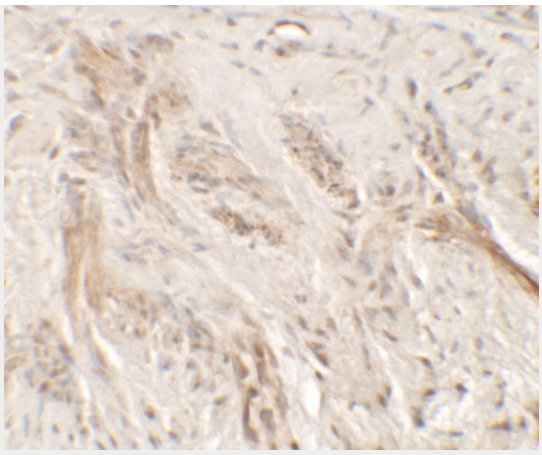
Provided below are standard protocols that you may find useful for product applications.

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

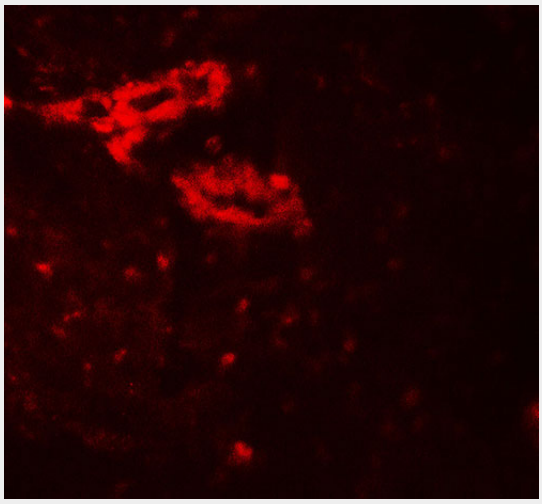
IL-36G Antibody - Images



Western blot analysis of IL-36G in human spleen tissue lysate with IL-36G antibody at (A) 1 and (B) 2 µg/ml.



Immunohistochemistry of IL-36G in human bladder tissue with IL-36G antibody at 5 µg/mL.



Immunofluorescence of IL-36G in human bladder tissue with IL-36G antibody at 20 µg/mL.

IL-36G Antibody - Background

IL-36G 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-36G is thought to activate the NF-kappaB pathway through IL-1 receptor family members IL-1RL2 and IL-1RAcP (2). Like the related proteins IL-36A and IL-36B, IL-36G requires post-translational processing for full agonist activity, but the cleavage mechanism is currently unknown (3). IL-36G expression is stimulated by interferon-gamma, tumor necrosis factor-alpha and interleukin 1 (4). The IL-36 cytokines have been suggested to amplify Th1 responses by enhancing proliferation and Th1 polarization of naive CD4+ T cells (5).

IL-36G 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.
Towne JE, Garka KE, Renshaw BR, et al. Interleukin (IL)-1F6, IL-1F8, and IL-1F9 signal through IL-1Rrp2 and IL-1RAcP to activate the pathway leading to NF-kappaB and MAPKs. J. Biol. Chem. 2004; 279:13677-88.
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.
Chustz RT, Nagarkar DR, Popowski JA, et al. Regulation and function of the IL-1 family cytokine

IL-1F9 in human bronchial epithelial cells. Am. J. Respir. Cell Mol. Biol. 2011; 45:145-53.