

Recombinant Human Interleukin-36 gamma, 169aa

(Human IL-36y,169aa)

Product Information

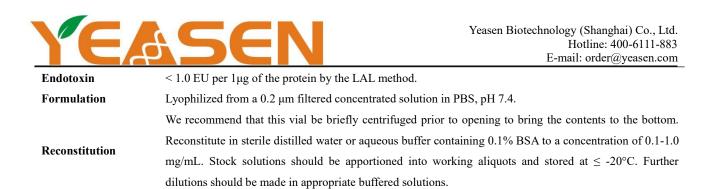
Product Name	Cat#	Size
Recombinant Human Interleukin-36 gamma, 169aa (Human IL-36γ,169aa)	90128ES10	10 µg
	90128ES60	100 µg
	90128ES76	500 µg

Product Description

IL-36 gamma [previously called IL-1F9, IL-1 epsilon (epsilon), and IL-1H1] is a member of the IL-1 family which includes IL-1 beta, IL- 1 alpha, IL- 1ra, IL-18, IL-36 Ra (IL-1F5), IL-36 alpha (IL-1F6), IL-36 beta (IL-1F8), IL-37 (IL-1F7) and IL-1F10. All family members show a 12 beta - strand, beta - trefoil configuration, and are believed to have arisen from a common ancestral gene. IL-36 gamma is an 18-22 kDa, 169 amino acid intracellular and secreted protein that contains no signal sequence, no prosegment and no potential N-linked glycosylation sites. Human IL-36 gamma (aa 18-169) shares 58%, 59%, 68% and 69% aa sequence identity with mouse, rat, bovine and equine IL-36 gamma, respectively, and 23-57% aa sequence identity with other family members. 134 aa isoform missing aa 19-53 has been reported. Highest levels of IL-36 gamma are produced by Langerhans cells, keratinocytes, and stomach Chief cells and parietal cells; these cells contribute to first-line defense against pathogens in the skin, lungs and digestive tract. Its expression is induced by LPS treatment of monocytes, and by IL- alpha / beta, IL-17 or TNF- alpha treatment of keratinocytes and bronchial epithelia. Skin IL-36 gamma expression is increased in contact hypersensitivity and psoriasis. It is elevated in inflammatory disorders of the lung (such as asthma) and viral infections. Lung IL-36 gamma and other IL-36 proteins contribute to neutrophil influx. The receptor for IL-36 alpha,beta and gamma all activate NF- kappa B and MAPK pathways in an IL-1 Rrp2 dependent manner, and IL-36 gamma induces production of inflammatory cytokines and chemokines such as CXCL8/IL-8.

Product Properties

Synonyms	IL-1RP2, IL-1 epsilon, IL-1F9, IL-1H1	
Accession	Q9NZH8	
GeneID	56300	
Source	E.coli-derived human Interleukin-36 gamma protein, Met1-Asp169, with an N-terminal Met.	
Molecular Weight	Approximately 18.7 kDa.	
	MRGTPGDADG GGRAVYQSMC KPITGTINDL NQQVWTLQGQ NLVAVPRSDS VTPVTVAVIT	
AA Sequence	CKYPEALEQG RGDPIYLGIQ NPEMCLYCEK VGEQPTLQLK EQKIMDLYGQ PEPVKPFLFY	
	RAKTGRTSTL ESVAFPDWFI ASSKRDQPII LTSELGKSYN TAFELNIND	
Tag	None	
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	
Purity	> 95% by SDS-PAGE and HPLC analyses.	
	Fully biologically active when compared to standard. The specific activity is determined by its binding	
Biological Activity	ability in a functional ELISA. Immobilized rHuIL-36 γ at 1 μ g/mL can bind recombinant human IL-1	
	Rrp2 Fc Chimera with a range of 0.15-5 μg/mL.	



Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

- 1. Avoid repeated freeze-thaw cycles.
- 2. For your safety and health, please wear lab coats and disposable gloves for operation.
- 3. For research use only.