IL-36 gamma/IL-1F9 Protein, Mouse

Cat. No.:	HY-P72544
Synonyms:	Interleukin-36 gamma; IL-36γ; IL36G; IL-1F9; IL-1H1
Species:	Mouse
Source:	E. coli
Accession:	Q8R460 (G13-S164)
Gene ID:	215257
Molecular Weight:	Approximately 17 kDa

PROPERTIES

AA Sequence	G R E T P D F G E V F D L D Q Q V W I F R N Q A L V T V P R S H R V T P V S V T I L P C K Y P E S L E Q D K G I A I Y L G I Q N P D K C L F C K E V N G H P T L L L K E E K I L D L Y H H P E P M K P F L F Y H T R T G G T S T F E S V A F P G H Y I A S S K T G N P I F L T S K K G E Y Y N I N F N L D I K S
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 1 M MOPS, 10 mM NaAc, 2 mM EDTA, 5 % Trehalose, 0.02 % Tween-20, pH 7.6.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	IL-36 gamma (IL-1F9), a subform of IL-36 family, belongs to IL-1 superfamily. IL-36 gamma is expressed in peripheral blood lymphocytes, keratinocytes, bronchial epithelial cells and THP-1 cells[3]. The sequence of amino acids in IL-36 gamma differs in different species. Human IL-36 gamma shares <55% aa sequence identity with mouse. IL-36 gamma has β-trefoil structure. L-36 gamma binds to IL-36R and recruits the co-receptor IL-1RAcP. So that heterodimeric signaling complex brings Toll/IL-1R (TIR) domains of the 2 receptor chains in close proximity, and thereby activating NF-κB and MAPK signaling pathways[1]. But the activation requires N-terminal cleavage at $Val15^{18}$ by neutrophil granule-derived proteases, such as cathepsin G, elastase and proteinase-3[1][2]. IL-36 gamma is an effective type I and IL-17-mediated immunity against bacterial lung infection[4]. IL-36 gamma also mediates immune protection during influenza

infection in mice[5].
IL-36 gamma is a pro-inflammatory factor. IL-36 gamma mediates inflammatory response through the activation of NF-κB and MAPK signaling pathway[2].

REFERENCES

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