

Recombinant Human Interleukin-36G 152a.a. (rh IL-36G/IL1F9)

Synonyms: Interleukin-1 epsilon, IL-1RP2, IL-1H1, IL1E, interleukin 1-related protein 2, Interleukin-1 homolog 1.

Introduction: IL-36gamma belongs to the IL-1 family which includes IL-1b, IL-1a, IL-1ra, IL-18, IL-36 Ra (IL-1F5), IL-36a (IL-1F6), IL-36b (IL-1F8), IL-37 (IL-1F7) and IL-1F10.). The IL-1 family members display a 12 b-strand, b-trefoil configuration, and are thought to have ascended from a mutual ancestral gene. IL-36g is an 18-22 kDa, 169aa intracellular and secreted protein which holds no signal sequence, no prosegment and no potential N-linked glycosylation sites. Human IL-36g shares 58%- 69% aa sequence homology with mouse, rat, bovine and equine IL-36g, and 23 - 57% aa sequence homology with other family members. The IL-36g receptor is a mixture of IL-1 Rrp2, mostly located in epithelia and keratinocytes, and the extensively expressed IL-1 RAcP. All IL-36 (a, b and g) activate N F- κ B and MAPK pathways in an IL-1 Rrp2 dependent reaction. Additionally, IL-36g induces production of inflammatory cytokines and chemokines like CXCL8/IL-8.

Description: Recombinant human IL-36G/152a.a. produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 152 amino acids and having a molecular mass of 17.0kDa. The IL36G (152 a.a.) is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2 μ m filtered concentrated solution in 1x PBS, pH 7.4 and 5% Trehalose.

Solubility: It is recommended to reconstitute the lyophilized rh IL-36G 152a.a. in sterile water not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL-36G although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution rh IL-36G should be stored at 4°C between 2-7days, for future use below -18°C. Please prevent freeze-thaw cycles.

Amino Acid Sequence: SMCKPITGTI NDLNQQVWTL QGQNLVAVPR SDSVTPVTV VITCKYPEAL EQGRGDPIYL GIQNPEMCLY CEKVGGEQPTL QLKEQKIMDL YGQPEPVKPF LFYRAKTGRT STLESVAFPD WFIASSKRDQ PIILTSELGK SYNTAFELNI ND

Purity: Greater than 95.0% as determined by SDS-PAGE.

Biological Activity: Fully biologically active when compared to standard. The ED50 as measured by its ability to induce IL-8 secretion in human preadipocytes is less than 15ng/ml, corresponding to a Specific Activity of 6.7x10³ IU/mg.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 μ g	Cat.N°	11347362
<i>medium</i>	10 μ g	Cat.N°	11347363

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