

Recombinant Human Interleukin 1 Family, Member 7 (rh IL1F7 / IL-37)

Synonyms: Interleukin-1 zeta, IL-1 zeta, Interleukin-1-related protein, IL1RP1, Interleukin-1 homolog 4, IIL-1H, IL1H4, FIL1 zeta, FIL1Z , IL-1X, FIL1

Introduction: Human Interleukin family 1, member 7 (IL1F7) belongs to the Interleukin-1 cytokine family. There are 5 alternatively spliced transcript variants encoding distinct isoforms with distinct expression profiles. The longest IL-1F7 transcript, named IL1F7b or IL1F7 isoform 1, encodes a 218 aa residues proprotein and containing a 45 aa propeptide which is cleaved to produce a mature protein. IL1F7b binds to IL18 Rbeta with low affinity however it doesn't exert any IL-18 agonistic or antagonistic effects. IL1F7b also binds IL18BP (Interleukin-18 binding protein) which is an inhibitory binding protein of Interleukin-18, and afterwards forms a complex with IL-18 receptor beta subunit and therefore it inhibits the activity of IL-18.

Description: Recombinant human IL1F7 produced in E.Coli is a single, non-glycosylated, Polypeptide chain containing 167 amino acids (Lys27-Asp192) and having a molecular mass of 18.6kDa. The IL1F7 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

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

Formulation: Lyophilized from a 0.2 µM filtered solution of 20 mM PB, 150mM NaCl and 2mM DTT, pH7.4.

Solubility: It is recommended to quick spin followed by reconstitution of IL1F7 in 1xPBS to a concentration not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rh IL1F7 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution it should be stored at 4° C between 2-7 days and for future use below -18° C. Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by

- a) Analysis by SEC-HPLC
- b) Analysis by SDS-PAGE.

Amino acid sequence:

MKNLNPKKFSIHDQDHKVLVLDSEGNLIAVDPKNIYRPEIFFALASSLSSASAEK
GSPILLGVSKGEFCLYCDKDKGQSHPSLQLKKEKLMKLAQKESARRPFIFYR
AQVGSWNMLESAHPGWFICTSCNCNEPVGVTDFENRKHIEFSFQPVCKAE MSPSEVSD.

Biological Activity: as measured by its binding ability in a functional ELISA immobilized IL1F7 at 1 µg/ml (100 µl/well) can bind rh IL-18 R/Fc Chimera with a linear range of 0.015 - 1 µg/ml.

This material is offered for **research use 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>	5 µg	Cat.N°	11344532
<i>medium</i>	25 µg	Cat.N°	11344534

ImmunoTools Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com
www.immunotools.com