Data Sheet (Cat.No.TMPY-01740)

TargetMol

IL-1 R9 Protein, Human, Recombinant (His)

General Information

Synonyms:	IL-1R9;IL1RAPL-2;IL1R9;TIGIRR-1;interleukin 1 receptor accessory protein-like 2
Protein Construction:	A DNA sequence encoding the extracellular domain (Met 1-Glu 356) of human IL1R9 (NP_059112.1) was expressed, with a C-terminal polyhistidine tag. Predicted N terminal: Thr 17
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q9NP60
Molecular Weight:	40.7 kDa (predicted); 50-55 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 98 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Shipping:

In general, Lyophilized powders are shipping with blue ice.

Protein Background

X-linked interleukin-1 receptor accessory protein-like 2 (IL1RAPL2) or Interleukin-1 receptor 9 (IL-1R9) is a member of the interleukin 1 receptor family. This protein is similar to the interleukin 1 accessory proteins. IL-1R9/IL1RAPL2 shows restricted expression in the fetal brain and is highly homologous to IL1RAPL, which is reportedly involved in nonsyndromic X-linked mental retardation. IL-1R9/IL1RAPL2 is highly homologous to IL-1R8. Both forms have no

known ligands and receptors are found in the fetal brain. IL-1R9/IL1RAPL2 may function as a negative receptor. Both IL1RAPL1 and IL1RAPL2 have novel C-terminal sequences not present in other related proteins. IL-1R9/IL1RAPL2 may be strong candidates for X-linked non-syndromic mental retardation loci, and that molecules resembling IL-1 and IL-18 play a role in the development or function of the central nervous system.

Reference

Jin H, et al. (2000) Two novel members of the interleukin-1 receptor gene family, one deleted in Xp22.1-Xp21.3 mental retardation. Eur J Hum Genet. 8(2): 87-94.

Sana TR, et al. (2000) Computational identification, cloning, and characterization of IL-1R9, a novel interleukin-1 receptor-like gene encoded over an unusually large interval of human chromosome Xq22.2-q22.3. Genomics. 69 (2): 252-62.

Gambino F, et al. (2007) IL1-receptor accessory protein-like 1 (IL1RAPL1), a protein involved in cognitive functions, regulates N-type Ca2+-channel and neurite elongation. Proc Natl Acad Sci. 104(21): 9063-8.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481