Recombinant Protein Technical Manual

Recombinant Mouse IL1R1/CD121a Protein (Fc Tag)(Active)

RPES4395

Product Data:

Product SKU: RPES4395

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: P13504

Protein Information:

Molecular Mass:	64.3 kDa
AP Molecular Mass:	70 kDa
Tag:	C-Fc
Bio-activity:	1. Measured by its binding ability in a functional ELISA.2. Immobilized recombinant human IL1b at 10 µg/mL (100 µl/well) can mouse IL1R1-Fc with a linear range of 62.5000 ng/mL.
Purity:	> 92 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage:	Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping:	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation:	Lyophilized from sterile PBS, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	Functional ELISA
Synonyms:	Interleukin receptor type 1;ILRT1; IL RI;CD121b;ILR1;IL-iR;Il1r

Immunogen Information:

Sequence: Met 1-Lys 338

Background:

Interleukin 1 receptor, type I (ILR1) also known as CD121a (Cluster of Differentiation 121a), is an interleukin receptor. ILR1/CD121a is a cytokine receptor that belongs to the interleukin 1 receptor family. This protein is a receptor for interleukin alpha (IL1A), interleukin beta (IL1B), and interleukin 1 receptor, type I (IL1R1/IL1RA). ILR1/CD121a is an important mediator involved in many cytokine induced immune and inflammatory responses. This protein has been characterized by pharmacological and molecular techniques in the mouse brain. The spindle-shaped astrocytes enclose the wound, separating the healthy from damaged neural tissue. The shape change and subsequent repair processes are ILβ activity-dependent, acting through the IL type 1 receptor (ILR1), as co-application of the ILtype 1 receptor antagonist protein (ILra) blocks ILβ induced effects. In the spleen, a slight increase in ILR AcP and ILR1 was observed during the first hours following LPS stimulation. In conclusion, ILR AcP mRNA is expressed in the brain and in other tissues where ILR1/CD121a transcripts are found. However, the regulation of its expression is distinct from ILR1/CD121a. The high level of expression and the lack of regulation of ILR AcP transcripts in the brain under inflammatory conditions suggest that the protein might be constitutively expressed in excess.