For Research Use Only

Recombinant Human IL-1R1 protein (rFc Tag)



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Catalog Number: Eg3002

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human IL-1R1 protein Asp21-Thr332 (Accession#P14778) with a rabbit IgG Fc tag at the Cterminus.

GeneID:

3554

Accession:

P14778

Predicted Molecular Mass:

61.9 kDa

SDS-PAGE:

68-90 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Interleukin-1 Receptor Type 1 (IL1R1) is a key component of the immune system, particularly in the mediation of inflammatory responses. IL1R1 is the primary receptor through which the pro-inflammatory cytokine interleukin-1 β (IL-1 β) exerts its effects. It plays a central role in the development and regulation of both non-specific defense mechanisms and specific immunity. IL1R1 has three extracellular domains critical for cytokine binding and one intracellular domain responsible for signal transduction. The interaction with IL-1 β leads to the activation of signaling pathways such as p38 α -MAPK and NF κ B, which are essential for inflammation and immune responses.

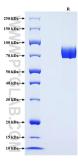
References

- 1. J V Zhukova. et al. (2024). Cytokine Growth Factor Rev. 80:59-71. 2. Charles A Dinarello. et al. (2018). Immunol Rev. 281(1):8-27. 3. Lori Broderick. et al. (2022). Nat Rev Rheumatol. 18(8):448-463. 4. Theresa V Rohm. et al. (2022). Immunity. 55(1):31-55.

Synonyms

IL1R1, CD121 antigen-like family member A, CD121A, D2S1473, EC:3.2.2.6

Selected Validation Data



Purity of Recombinant Human IL-1R1 was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.