For Research Use Only

Recombinant Mouse IL-1RA protein (His Tag)



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Catalog Number: Eg0685

Basic Information

Species: Mouse

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity: >90 %, SDS-PAGE

Endotoxin Level:

<0.1 EU/ µ g protein, LAL method

HEK293-derived Mouse IL-1RA protein Arg8-Gln159 (Accession# Q542W1) with a His tag at the C-terminus.

GeneID:

Q542W1

Predicted Molecular Mass:

18.4 kDa

SDS-PAGE:

16-21 kDa, reducing (R) conditions

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

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

Until expiry date, -20°C to -80°C as lyophilized proteins.

3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

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

IL-1Ra, also known as IL-1F3, is a member of the interleukin 1 cytokine family. It is a receptor antagonist of IL-1, can competitively bind with IL-1R1 thereby blocking cell activation by the cytokine. IL-1Ra is secreted by various types of cells including immune cells, epithelial cells, and adipocytes, and is a natural inhibitor of the pro-inflammatory effect of IL1 β . This protein inhibits the activities of interleukin 1, alpha (IL1A) and interleukin 1, beta (Il1B), and modulates a variety of interleukin 1 related immune and inflammatory responses, particularly in the acute phase of infection and inflammation. As a potent immune/inflammatory molecule, IL-1Ra is tightly associated with osteomyelitis, rheumatoid arthritis, traumatic brain injury (TBI) and stroke. Recently, an increasing number of studies proved that IL-1Ra is also actively involved in tumor progression, such as high expression IL-1Ra increased the risk of bladder cancer and non-cardia gastric carcinoma.

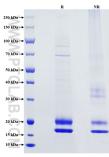
References

- 1. Stephane Perrier.et al. (2006) FEBS Lett. 580(27):6289-94. 2. Charles A. Dinarello. et al. (2020) Immunol Rev. 281(1):8-27. 3. Ivona Aksentijevich. et al. (2009) N Engl J Med. 360(23):2426-37. 4. C Grond-Ginsbach. et al. (2008) J Neurol. 255(5):723-31. 5. Gifone Aguiar Rocha. et al. (2005) Int J Cancer. 115(5):678-83. 6. Zhibin Hu. et al. (2006) Cancer Lett. 236(2):269-75.

Synonyms

Il1rn, IL-1RN, IL 1ra, Interleukin-1

Selected Validation Data



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