

Recombinant Mouse RAGE protein (His Tag)

Catalog Number: Eg0873

Basic Information	Species: Mouse	Purity: >90 %, SDS-PAGE	Tag: His Tag
-------------------	-------------------	----------------------------	-----------------

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ µg protein, LAL method

Source:
HEK293-derived Mouse RAGE protein Gly23-Ala340 (Accession# Q62151-1) with a His tag at the C-terminus.

GeneID:
11596

Accession:
Q62151-1

Predicted Molecular Mass:
34.8 kDa

SDS-PAGE:
37-45 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°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C 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

RAGE (receptor for advanced glycation endproducts), also called AGER, is a transmembrane receptor of the immunoglobulin super family. It mediates interactions of advanced glycosylation end products (AGE) which accumulate in vascular tissue in aging in diabetes. Acts as a mediator of vascular inflammation such as atherosclerosis and a complication of diabetes. AGE/RAGE signal regulates production or expression of TNF-α, oxidative stress, and endothelial dysfunction in type 2 diabetes. Interaction with S100A12 on endothelium, mononuclear phagocytes, and lymphocytes triggers cellular activation. Interaction with S100B after myocardial infarction regulates myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling. ABPP-initiated RAGE signaling, especially stimulation of P38 mitogen-activated protein kinase (MAPK), delivers ABPP as a complex with RAGE to the intraneuronal. RAGE has higher expression in lung tissues, in particular in alveolar type I cells, and is lost in idiopathic pulmonary fibrosis (IPF).

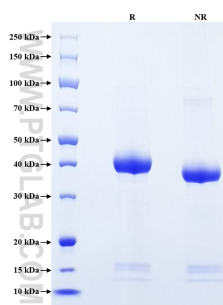
References

1. Neeper M. et al. (1992) J Biol Chem. 267(21):14998-5004.
2. Hofmann MA. et al. (1999) Cell. 97(7):889-901.
3. Markus A. et al. (2008) Am J Respir Cell Mol Bio. 39(3):337-45.
4. Xue G. et al. (2008) Am J Physiol Heart Circ Physiol. 295(2):H491-8.
5. Takuma K. et al. (2009) Proc Natl Acad Sci U S A. 106(47):20021-6.
6. Fang F. et al. (2010) FASEB J. 24(4):1043-55.

Synonyms

Ager, Advanced glycosylation end product-specific receptor, MOK, RAGE 1, RAGE1

Selected Validation Data



Purity of Recombinant Mouse RAGE 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.

For technical support and original validation data for this product please contact

T: 027-87531629

E: Proteintech-CN@ptglab.com

W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.