

ARG70262 Human RAGE recombinant protein (Fc-His-tagged, C-ter)

Package: 100 µg
Store at: -20°C

Summary

Product Description	HEK293 expressed, Fc-His-tagged (C-ter) Human RAGE recombinant protein.
Tested Reactivity	Hu
Tested Application	Binding, SDS-PAGE
Target Name	RAGE
Species	Human
A.A. Sequence	Gln24 - Ala344 of Human RAGE (NP_001127.1) with an Fc - 6X His tag at the C - terminus.
Expression System	HEK293
Alternate Names	Receptor for advanced glycosylation end products; Advanced glycosylation end product-specific receptor; RAGE

Application Instructions

Application Note	<p>Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Recombinant human HMGB1 at 2 µg/ml (100 µl/well) can bind Recombinant human AGER with a linear range of 15-50 ng/ml.</p> <p>Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Human S100A12 at 2 µg/ml (100 µl/well) can bind recombinant Human AGER/RAGE, the EC50 of Human AGER/RAGE is 27.25 ng/ml.</p>
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Properties

Form	Powder
Purification Note	0.22 µm filter sterilized. Endotoxin level is 90% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	AGER
Gene Full Name	advanced glycosylation end product-specific receptor
Background	The advanced glycosylation end product (AGE) receptor encoded by this gene is a member of the immunoglobulin superfamily of cell surface receptors. It is a multiligand receptor, and besides AGE, interacts with other molecules implicated in homeostasis, development, and inflammation, and certain diseases, such as diabetes and Alzheimer's disease. Many alternatively spliced transcript variants

encoding different isoforms, as well as non-protein-coding variants, have been described for this gene (PMID:18089847). [provided by RefSeq, May 2011]

Function

Mediates interactions of advanced glycosylation end products (AGE). These are nonenzymatically glycosylated proteins which accumulate in vascular tissue in aging and at an accelerated rate in diabetes. Acts as a mediator of both acute and chronic vascular inflammation in conditions such as atherosclerosis and in particular as a complication of diabetes. AGE/RAGE signaling plays an important role in regulating the production/expression of TNF-alpha, oxidative stress, and endothelial dysfunction in type 2 diabetes. Interaction with S100A12 on endothelium, mononuclear phagocytes, and lymphocytes triggers cellular activation, with generation of key proinflammatory mediators. Interaction with S100B after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling (By similarity). Receptor for amyloid beta peptide. Contributes to the translocation of amyloid-beta peptide (ABPP) across the cell membrane from the extracellular to the intracellular space in cortical neurons. ABPP-initiated RAGE signaling, especially stimulation of p38 mitogen-activated protein kinase (MAPK), has the capacity to drive a transport system delivering ABPP as a complex with RAGE to the intraneuronal space. Can also bind oligonucleotides. [UniProt]

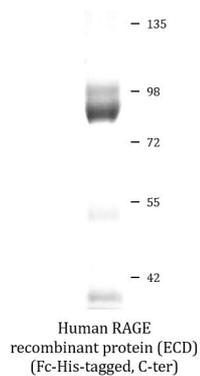
Calculated Mw

43 kDa

Cellular Localization

Isoform 1: Cell membrane; Single-pass type I membrane protein. Isoform 2: Secreted. Isoform 10: Cell membrane; Single-pass type I membrane protein. [UniProt]

Images



ARG70262 Human RAGE recombinant protein (ECD) (Fc-His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70262 Human RAGE recombinant protein (ECD) (Fc-His-tagged, C-ter).