

Recombinant human RAGE/AGER protein

Catalog Number: ATGP3923

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

24-342aa

UniProt No.

Q15109

NCBI Accession No.

NP_001127

Alternative Names

RAGE, AGER, advanced glycosylation end product-specific receptor isoform 1, SCARJ1, Receptor for advanced glycosylation end products

PRODUCT SPECIFICATION

Molecular Weight

61.2 kDa (561aa)

Concentration

0.25mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured by the ability of the binding activity in a functional ELISA. The ED50 range $\leq 15\mu\text{g/ml}$.

Tag

hIgG-His-Tag

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant human RAGE/AGER protein

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Description

RAGE, also known as advanced glycosylation end product-specific receptor isoform 1, is a member of the immunoglobulin super-family transmembrane proteins. It mediates interactions of advanced glycosylation end products (AGE). AGE/RAGE signaling plays an important role in regulating the production/expression of TNF-alpha, oxidative stress, and endothelial dysfunction in type 2 diabetes. This protein contributes to the translocation of amyloid-beta peptide (ABPP) across the cell membrane from the extracellular to the intracellular space in cortical neurons. Recombinant human RAGE, fused to hIgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

<ADL>QNITARI GEPLVLKCKG APKKPPQRLE WKLNTGRTEA WKVLSPQGGG PWDSVARVLP NGSLFLPAVG IQDEGIFRCQ AMNRNGKETK SNYRVRVYQI PGKPEIVDSA SELTAGVPNK VGTCVSEGSY PAGTLSWHLD GKPLVPNEKG VSVKEQTRRH PETGLFTLQS ELMVTPARGG DPRPTFSCSF SPGLPRHRAL RTAPIQPRVW EPVPLEEVQL VVEPEGGAVA PGGTVTLTCE VPAQPSPQIH WMKDGVPLPL PPSVLILPE IGPQDQGTYS CVATHSSHGP QESRAVSISI IEPGEEGPTA GSVGGSGGLGT LA<LEPKSCDK THTCPPCAP ELLGGPSVFL FPPKPKDTLM> <ISRTPEVTCV VVDVSHEDPE VKFNWYVDGV EVHNAKTKPR EEQYNSTYRV VSVLTVLHQD WLNGKEYKCK VSNKALPAPI EKTISKAKGQ> <PREPQVYTLPSRDELTKNQ VSLTCLVKGF YPSDIAVEWE SNGQPENNYK TPPVLDSDG SFFLYSKLTV DKSRWQQGNV FSCSVMHEAL> <HNHYTQKSLS LSPGKHHHHH H>

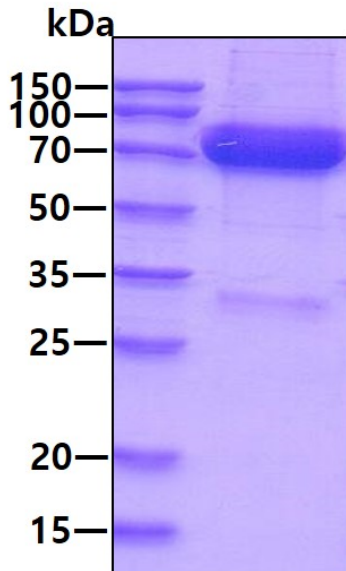
General References

Giurdanella G., et al. (2017) *Biochem Pharmacol.* 142:145-154
 Zhang L., et al. (2019) *Int J Mol Med.* 44:885-892

DATA

SDS-PAGE

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.



Biological Activity

Recombinant human RAGE/AGER protein

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Human HMGB1 is coated at 20 ug/ml (100 ul/well) can bind Human RAGE. The ED50 range ≤ 15 ug/ml.

