

Product datasheet for SC331710

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RAGE (AGER) (NM_001206934) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: RAGE (AGER) (NM_001206934) Human Untagged Clone

Tag: Tag Free Symbol: RAGE

Synonyms: RAGE; SCARJ1; sRAGE

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC331710 representing NM_001206934.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGCAGCCGGAACAGCAGTTGGAGCCTGGGTGCTGGTCCTCAGTCTGTGGGGGGGCAGTAGTAGGTGCT CAAAACATCACAGCCCGGATTGGCGAGCCACTGGTGCTGAAGTGTAAGGGGGGCCCCCAAGAAACCACCC CAGCGGCTGGAATGGAAACTGAACACAGGCCGGACAGAAGCTTGGAAGGTCCTGTCTCCCCAGGGAGGA GATGAGGGGATTTTCCGGTGCCAGGCAATGAACAGGAATGGAAAGGAGACCAAGTCCAACTACCGAGTC CGTGTCTACCAGATTCCTGGGAAGCCAGAAATTGTAGATTCTGCCTCTGAACTCACGGCTGGTGTTCCC AATAAGGTAGTGGAAGAAAGCAGGAGAAGTAGAAAACGGCCCTGTGAACAGGAGGTGGGGACATGTGTG TCAGAGGGAAGCTACCCTGCAGGGACTCTTAGCTGGCACTTGGATGGGAAGCCCCTGGTGCCTAATGAG AAGGGAGTATCTGTGAAGGAACAGACCAGGAGACACCCTGAGACAGGGCTCTTCACACTGCAGTCGGAG CTAATGGTGACCCCAGCCCGGGGAGAGATCCCCGTCCCACCTTCTCCTGTAGCTTCAGCCCAGGCCTT CCCCGACACCGGGCCTTGCGCACAGCCCCCATCCAGCCCCGTGTCTGGGAGCCTGTGCCTCTGGAGGAG GTCCAATTGGTGGTGGAGCCAGAAGGTGGAGCAGTAGCTCCTGGTGGAACCGTAACCCTGACCTGTGAA GTCCCTGCCCAGCCCTCTCCTCAAATCCACTGGATGAAGGATGGTGTGCCCCTTGCCCCTTCCCCCCAGC CCTGTGCTGATCCTCCCTGAGATAGGGCCTCAGGACCAGGGAACCTACAGCTGTGTGGCCACCCATTCC AGCCACGGGCCCCAGGAAAGCCGTGCTGTCAGCATCAGCATCATCGAACCAGGCGAGGAGGGGCCAACT GCAGGTGAGGGGTTTGATAAAGTCAGGGAAGCAGAAGATAGCCCCCAACACATGTGA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001206934

Insert Size: 1092 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



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Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001206934.1</u>

RefSeq Size: 1511 bp RefSeq ORF: 1092 bp Locus ID: 177

 UniProt ID:
 Q15109

 Cytogenetics:
 6p21.32

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

MW: 39 kDa

Gene Summary:

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-proteincoding variants, have been described for this gene (PMID:18089847). [provided by RefSeq,

May 2011]

Transcript Variant: This variant (4, also known as RAGE_v6) lacks the penultimate coding exon, and uses alternate donor splice sites at two internal coding exons compared to variant 1. This results in a frame-shift and a shorter isoform (4) with a distinct C-terminus compared to isoform 1. Sequence Note: This Refseq, containing two in-frame translation initiation codons (at nt 8-10 and nt 101-103), is annotated with a CDS starting from the downstream AUG (dAUG) because the AGE receptor encoded by this gene is a known type 1 transmembrane protein requiring signal peptide for its function, and a signal peptide of 22 aa is predicted for the dAUG initiated protein. Translation initiation from the upstream AUG (uAUG) will add an extra 31 aa to the N-terminus, and no signal peptide is predicted for the uAUG initiated

protein.