

## Product datasheet for **SC306735**

### RAGE (AGER) (NM\_172197) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RAGE (AGER) (NM_172197) Human Untagged Clone
Tag:	Tag Free
Symbol:	RAGE
Synonyms:	RAGE; SCARJ1; sRAGE
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_172197 edited  
GGTCCCTGGAAGGAAGCAGGATGGCAGCCGGAACAGCAGTTGGAGCCTGGGTGCTGGTCC  
TCAGTCTGTGGGGGCAGTAGTAGGTGCTCAAAACATCACAGCCGGATTGGCGAGCCAC  
TGGTGCTGAAGTGTAAAGGGGCCCAAGAAACCACCCAGCGCTGGAATGGAAACTGG  
GAGGAGGCCCTGGGACAGTGTGGCTCGTGTCTTCCCAACGGCTCCCTTCTCTCCGG  
CTGTCCGGATCCAGGATGAGGGGATTTTCCGGTGCCAGGCAATGAACAGGAATGGAAAGG  
AGACCAAGTCCAACCTACCGAGTCCGTGTCTACCAGATTCTGGGAAGCCAGAAATTGTAG  
ATTCTGCCTCTGAACTCACGGCTGGTGTCCCAATAAGGTGGGGACATGTGTGTGAGAGG  
GAAGCTACCCTGCAGGGACTCTTAGCTGGCACTTGGATGGGAAGCCCTGGTGCCTAATG  
AGAAGGGAGTATCTGTGAAGGAACAGACCAGGAGACACCCTGAGACAGGGCTCTTCACAC  
TGCAGTCGGAGCTAATGGTGACCCAGCCGGGGAGGAGATCCCGTCCCACCTTCTCCT  
GTAGCTTCAGCCAGGCCTTCCCGACACCGGGCCTTGCGCACAGCCCCATCCAGCCCC  
GTGTCTGGGAGCCTGTGCCTCTGGAGGAGTCCAATTGGTGGTGGAGCCAGAAGGTGGAG  
CAGTAGCTCCTGGTGAACCGTAACCCCTGACCTGTGAAGTCCCTGCCAGCCCTCTCCTC  
AAATCCACTGGATGAAGGATGTGAGTGACCTGGAGAGAGGGGCTGGGAGAACCAGGCGAG  
GAGGGGCCAAGTGCAGGCTCTGTGGGAGGATCAGGGCTGGGAACCTAGCCCTGGCCCTG  
GGGATCCTGGGAGGCCTGGGACAGCCGCCCTGCTCATTGGGGTCATCTTGTGGCAAAGG  
CGGCAACGCCGAGGAGAGGAGAGGAAGGCCCAAGAAACCAGGAGGAAGAGGAGGAGCGT  
GCAGAAGTGAATCAGTCGAGGAACCTGAGGCAGGCGAGAGTAGTACTGGAGGGCCTTGA  
GGGGCCACAGACAGATCCCATCCATCAGCTCCCTTTTCTTTTCCCTTGAAGTGTCTG  
GCCTCAGACCAACTCTCTCCTGTATAATCTCTCCTGTATAACCCACCTTGCCAAAGCT  
TTCTTCTACAACCAGAGCCCCACAATGATGATTAACACCTGACACATCTCAAAAAA  
AAAAAAAAAAAAAAAAAAAA



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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_172197 unedited</p> <pre>GGTGCTATATGTATACGACTCCTATAGGGCGGCCGGAATTCGGCCATTACGGCCGGGG TCCCTGGAAGGAAGCAGGATGGCAGCCGGAACAGCAGTTGGAGCCTGGGTGCTGGTCCTC AGTCTGTGGGGGCGAGTAGTAGGTGCTCAAAACATCACAGCCGGATTGGCGAGCCACTG GTGCTGAAGTGTAAAGGGGGCCCCAAGAAACCACCCAGCGGCTGGAATGGAACTGGGA GGAGGCCCTGGGACAGTGTGGCTCGTGCCTTCCAACGGCTCCCTCTCCTCCGGCT GTCCGGATCCAGGATGAGGGGATTTCCGGTGCCAGGCAATGAACAGGAATGAAAAGGAG ACCAAGTCCAACCTACCGAGTCCGTGTCTACCAGATTCTGGGAAGCCAGAAATTGTAGAT TCTGCCTCTGAACTCACGGCTGGTGTCCCAATAAGGTGGGGACATGTGTGTGAGAGGGA AGCTACCTGCAGGGACTCTTAGCTGGCACTTGGATGGGAAGCCCTGGTGCCTAATGAG AAGGGAGTATCTGTGAAGGAACAGACCAGGAGACACCCTGAGACAGGGCTCTTCACACTG CAGTCGGAGCTAATGGTGACCCAGCCGGGGAGGAGATCCCCGTCCCACCTTCTCTGT AGCTTTCAGCCCCAGGCCCTTCCCCGACACCGGGCCTTGCACAGCCCCCATCCAGCC CCCGTGTCTGGGAGCCTGTGCCTCTGGAGGAGTCCAATTGGTGGTGGAGCCAGAAGTGG AGCAGTAGCTCCTGGTGAACCGTAACCCTGACCTGTGAAGTCCCTGCCAGCCCTCTCC TCAATCCACTGATGAAGATGTGAGTGACCTGGAGAGAGGGGCTGGGAGACCAGCGAGAGG GCCAACTGCAGCCTCTGTGGGAGGATCAGGGCCTGGGAACCTTCTAGCCCTGG</pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_172197 unedited</p> <pre>ATGACGTATGCACCCTCAGGGCCGGAAGGCACCTGGGGTAGTGTGTACAGGGCACTGC CACCCGGGATCTGTTCCAGAAACAGCTATGACCGCGCCGCAATCTAGAGTCGAGAGGCC GAGGCGGCCGACATGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGATGTGTGAGGTTT AATCATCATTGTGGGGCTCTGGTTGTAGAAGAAAGCTTGGCAAGTGGGGTTATACAGG AGAGAGATTATACAGGAGAGAGTTGGTCTGAGGCCAGAACAGTTCAAGGAAAAAAGAAA GGGAGCTGATGGATGGGATCTGTCTGTGGGCCCTCAAGGCCCTCCAGTACTACTCTCGC CTGCCTCAGGTTCTCCGACTGATTCACTTCTGCACGCTCCTCCTCTTCTCCTGGTTTT CTGGGGCCTTCTCTCCTCTCCTCGGCCTTCCGCAAGATGACCCCAATGA GCAGGGCGGCTGTCCCAGGCCTCCCAGGATCCCAGGGCCAGGGCTAGAGTTCCAGCC CTGATCCTCCCACAGAGCCTGCAGTTGGCCCTCCTCGCTGGTCTCCCAGCCCTCTC TCCAGGTCACACTCACATCCTTCCATCCAGTGGATTGAGGAGAGGGCTGGGAGGGACTTCA CAGGTCAGGGTTACGGTTCACCAGGAGCTACTGCTCCACCTTCTGGCTCCACCACCAAT TGGACCTCCTCCAGAGGCACAGGCTCCCAGACAGGGGCTGGATGGGGGCTGTGCCCAAG GCCCGGTGTCCGGGAAGGCTGGGCTGAAGCTACAGGAGAAGTGGGACGGGGATCTCCTC CCCGGGTGGGGTACCATTAGCTCCGACTGCAGTGTGAAGAGCCTGTCTCAGGTGTCTC TGTCTGTCTCACAGATACTCCTCTCATAGGCACCAGGCTTCCATCCAGTCCAGCTAAAA AGTT</pre>
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_172197
<b>Insert Size:</b>	1300 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
<b>Components:</b>	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:** [NM\\_172197.1](#), [NP\\_751947.1](#)

**RefSeq Size:** 1259 bp

**RefSeq ORF:** 1029 bp

**Locus ID:** 177

**UniProt ID:** [Q15109](#)

**Cytogenetics:** 6p21.32

**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

**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-protein-coding variants, have been described for this gene (PMID:18089847). [provided by RefSeq, May 2011]

**Transcript Variant:** This variant (7, also known as RAGE\_v16) uses alternate splice sites at several internal coding exons compared to variant 1. This results in a frame-shift and a shorter isoform (7, also known as hRAGEsec) 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.