

## Product datasheet for **SC309998**

### Eph receptor A5 (EPHA5) (NM\_004439) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Eph receptor A5 (EPHA5) (NM\_004439) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Eph receptor A5  
**Synonyms:** CEK7; EHK-1; EHK1; EK7; HEK7; TYRO4  
**Mammalian Cell Selection:** None  
**Vector:** [pCMV6-XL5](#)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_004439 edited  
 ATGCGGGGCTCGGGGCCCGGGGTGCGGGACRCCGGCGGCCCAAGCGGGCGGGCGAC  
 ACCCCATCACCACAGCGTCCCTGGCCGGCTGCTACTCTGCACCTCGACGGGCTCCCTC  
 TGGACGTGCCTTCTCCTGTGCGCCGCACTCCGGACCCTCCTGGCCAGCCCAGCAACGAA  
 GTGAATTTATTGGATTACGCACTGTCATGGGGGACCTGGGATGGATTGCTTTTCCAAAA  
 AATGGGTGGGAAGAGATTGGTGAAGTGGATGAAAATTATGCCCTATCCACACATACAA  
 GTATGCAAAGTATGGAACAGAATCAGAATAACTGGCTTTTGACCAGTTGGATCTCCAAT  
 GAAGGTGCTTCCAGAATCTTCATAGAACTCAAATTTACCCTGCGGGACTGCAACAGCCTT  
 CCTGGAGGACTGGGGACCTGTAAGGAACTTTAATATGTATTACTTTGAGTCAGATGAT  
 CAGAATGGGAGAAACATCAAGGAAAACCAATACATCAAATTTGATACCATTGCTGCCGAT  
 GAAAGCTTTACAGAACTTGTCTTGGTGACCGTGTATGAAACTGAATACAGAGGTCAGA  
 GATGTAGGACCTTAAGCAAAAAGGGATTTTATCTTGGCTTTTCAAGATGTTGGTGCTTGC  
 ATTGCTCTGGTTTCTGTGCGTGTATACTATAAAAAATGCCCTTCTGTGGTACGACTTG  
 GCTGTCTTCCCTGACACCATCACTGGAGCTGATTCTTCCCAATTGCTCGAAGTGTGAGGC  
 TCCTGTGTCAACCATTCTGTGACCGATGAACCTCCCAAAATGCACTGCAGCGCCGAAGGG  
 GAGTGGCTGGTGGCCATCGGGAATGCATGTGCAAGGCAGGATATGAAGAGAAAAATGGC  
 ACCTGTCAAGTGTGACAGCTGGGTTCTTCAAAGCCTCACCTCACATCCAGAGCTGCGGC  
 AAATGTCCACCTCACAGTTATACCCATGAGGAAGCTTCAACCTCTTGTGTCTGTGAAAAG  
 GATTATTTTCAGGAGAGAGTCTGATCCACCACAATGGCATGCACAAGACCCCTCTGCT  
 CCTCGGAATGCCATCTCAAATGTTAATGAACTAGTGTCTTTCTGGAATGGATTCCGCT  
 GCTGACACTGGTGAAGGAAAGACGTGTATATTATATTGCATGCAAGAAGTGAACCTCC  
 CATGCAGGTGTGTGAGGAGTGTGGCGGTGATGTGAGGTACCTTCCCGGCAAAGCGGC  
 CTGAAAAACACCTCTGTGATGATGGTGGATCTACTCGCTCACACAACTATACCTTTGAG  
 ATTGAGGCAGTGAATGGAGTGTCCGACTTGAGCCAGGAGCCCGGCAGTATGTGTCTGTA  
 AATGTAACCACAAATCAAGCAGCTCCATCTCCAGTCACCAATGTGAAAAAAGGGAAAATT  
 GCAAAAAACAGCATCTCTTTGTCTTGGCAAGAACCAGATCGTCCCAATGGAATCATCCTA  
 GAGTATGAAATCAAGTATTTTAAAAGGACCAAGAGACCAGCTACACGATTATCAAACTCT



[View online »](#)

```

AAAGAGACAACACTATTACTGCAGAGGGCTTGAAACCAGCTTCAGTTTATGTCTTCCAAATT
CGAGCACGTACAGCAGCAGGCTATGGTGTCTTCAGTCGAAGATTTGAGTTTCAAACCACC
CCAGTGTTTGCAGCATCCAGCGATCAAAGCCAGATTCCTGTAATTGCTGTGTCTGTGACA
GTGGGAGTCATTTTGTGGCAGTGGTTATCGGCCGTCTCCTCAGTGGAAGTTGCTGCGAA
TGTGGCTGTGGGAGGGCTTCTCCCTGTGCGCTTTGCCATCCAAGCCTAATATGGCGG
CACATTAACCTGCCAGGAGTAAGAACCTACATTGATCCACATACCTATGAGGATCCCAAT
CAAGCTGTCCACGAATTTGCTAAGGAGATAGAAGCATCATGTATCACCATTGAGAGAGTT
ATTGGAGCAGGTGAATTTGGTGAAGTTTGTAGTGGACGTTTGAAACTACCAGGAAAAAGA
GAATTACCTGTGGCTATCAAACCCTTAAAGTAGGCTATACTGAAAAGCAACGCAGAGAT
TTCCTAGTGGAAGCAAGTATCATGGGACAGTTTGATCATCCTAACATCATCCATTTAGAA
GGTGTGGTGACCAAAAAGTAAACCAGTGATGATCGTGACAGAGTATATGGAGAATGGCTCT
TTAGATACATTTTGAAGAAAAACGATGGGCAGTTCAGTGTGATTGAGCTTGTGGCATG
CTGAGAGGTATCTCTGCAGGAATGAAGTACCTTTCTGACATGGGCTATGTGCATAGAGAT
CTTGCTGCCAGAAACATCTTAATCAACAGTAACCTTGTGTGCAAAGTGTCTGACTTTGGA
CTTTCCCGGGTACTGGAAGATGATCCCGAGGCAGCTACACCACAAGGGGAGGAAAAAATT
CCAATCAGATGGACTGCCCCAGAAGCAATAGCTTTCCGAAAGTTTACTTCTGCCAGTGAT
GTCTGGAGTTATGGAATAGTAATGTGGGAAGTTGTGTCTTATGGAGAGAGACCCTACTGG
GAGATGACCAATCAAGATGTGATTAAGCGGTAGAGGAAGGCTATCGTCTGCCAAGCCCC
ATGGATTGTCCTGCTGCTCTATCAGTTAATGCTGGATTGCTGGCAGAAAAGAGCGAAAT
AGCAGGCCCAAGTTTGTGAAATAGTCAACATGTTGGACAAGCTGATACGTAACCCAAGT
AGTCTGAAGACGCTGGTTAATGCATCCTGCAGAGTATCTAATTTATTGGCAGAACATAGC
CCACTAGGATCTGGAGCCTACAGATCAGTAGGTGAATGGCTAGAGGCAATCAAGATGGGC
CGGTATACAGAGATTTTCATGGAAAATGGATACAGTTCAATGGACGCTGTGGCTCAGGTG
ACCTTGGAGGATTTGAGACGGCTTGGAGTGACTCTGTGCGGTACCAGAGAAGATCATG
AACAGCCTTAAGAAATGAAGGTGCAGCTGGTAAACGGAATGGTGCCATTGTAA

```

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_004439

**Insert Size:**

3100 bp

**OTI Disclaimer:**

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:**

The ORF of this clone has been fully sequenced and found to be a good match to NM\_004439.4 except for 2 SNPs.

**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:** [NM\\_004439.4](#), [NP\\_004430.3](#)

**RefSeq Size:** 8418 bp

**RefSeq ORF:** 3114 bp

**Locus ID:** 2044

**UniProt ID:** [P54756](#)

**Cytogenetics:** 4q13.1-q13.2

**Domains:** pkinase, EPH\_lbd, TyrKc, SAM, S\_TKc, FN3

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

**Protein Pathways:** Axon guidance

**Gene Summary:** This gene belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Aug 2013]

Transcript Variant: This variant (1) used an alternate splice site in the coding region compared to variant 3. The resulting protein (isoform a) is shorter but has the same N- and C-termini compared to isoform c. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.