

## Product datasheet for **SC323514**

### 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:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_004439, the custom clone sequence may differ by one or more nucleotides

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ATGCGGGGCTCGGGGCCCGGGGTGCGGGACGCCGGCGGCCCAAGCGGGCGGGCAGACCCCATCA
CCCCAGCGTCCCTGGCCGGCTGCTACTCTGCACCTCGACGGGCTCCCCTCTGGACGTGCCTTCTCCTGTG
CGCCGCACTCCGGACCCCTCTGGCCAGCCCCAGCAACGAAGTGAATTTATTGGATTACGCACTGTCATG
GGGGACCTGGGATGGATTGCTTTTCAAAAAATGGGTGGGAAGAGATTGGTGAAGTGGATGAAAATTATG
CCCCTATCCACACATACCAAGTATGCAAAGTGATGGAACAGAATCAGAATAACTGGCTTTTGACCAGTTG
GATCTCCAATGAAGGTGCTTCCAGAATCTTCATAGAACTCAAATTTACCCTGCGGGACTGCAACAGCCTT
CCTGGAGGACTGGGGACCTGTAAGGAAACCTTTAATATGTATTACTTTGAGTCAGATGATCAGAATGGGA
GAAACATCAAGGAAAACCAATACATCAAATTTGATACCATTGCTGCCGATGAAAGCTTTACAGAACTTGA
TCTTGGTGACCGTGTATGAAACTGAATACAGAGGTGAGAGATGAGGACCTCTAAGCAAAAAGGGATTT
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CTTCAAATTCGAGCACGTACAGCAGCAGGCTATGGTGTCTTCAGTCGAAGATTTGAGTTTGAACCACC
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TTTTGTTGGCAGTGGTTATCGGCGTCTCCTCAGTGAAGTTGCTGCGAATGTGGCTGTGGGAGGGCTTC
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ATACCTATGAGGATCCCAATCAAGCTGTCCACGAATTTGCTAAGGAGATAGAAGCATCATGTATCCCAT
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ATGCTGGATTGCTGGCAGAAAGAGCGAAATAGCAGGCCCAAGTTTGTGAAATAGTCAACATGTTGGACA
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CGGTATACAGAGATTTTTCATGAAAAATGGATACAGTTCAATGGACGCTGTGGCTCAGGTGACCTTGAGG
ATTTGAGACGGCTTGAGTACTCTTGTGCGTCCAGAGAAGATCATGAACAGCCTTCAAGAAATGAA
GGTGCAGCTGTTAAACGGAATGGTGCCATTGTAA
    
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for mutant NM_004439 unedited ACGCCGCTGAGCAACTGGGCGGTAGGCCTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTG AACCGTCAGAATTTTGTAACTACTACTATAGGGCGGCGCGAATTCGGCACGAGGCCGAAGCGGTGG ACTGAGCCGCTCGGGACAGCGGCACCGGAGGAGCTCGGAGAAGATGCGGGGCTCGGGGCCCCGGGTGC GGGACGCCGGCGGCCCAAGCGGGCGGCGACACCCCATCACCCAGCGTCCCTGGCCGGCTGCTAC TCTGCACTCGACGGGCTCCCTCTGGACGTGCCTTCTCTGTGCGCCGCACTCCGGACCCTCCTGGCCA GCCCCAGCAACGAAGTGAATTTATTGGATTACGCACTGTCCATGGGGGACCTGGGATGGATTGCTTT TTCCAAAAAAGGGTGGGAAAGGAAATTGGTGAAGTTGGATGAAAAATTATGCCCTATCCCCACTTC CCAATTTTGCAAAGTGGATGGAACAGAACCAGAAATACCGGCTTTGGACGTTTGGTTCTCCAATGAGGG GCCTCCAGAATCCTTATAGAACTCAAAATTTACCTGGGGCTGCAAAGCCCTTCTGGGAGAGACGGGG GACTGTGTAGGAACTTTTATATGTATTATCATTTGAGTCTGATAAGAACCAAAGGGAGAAACACTCAGA GAACCCTATATCTCAAATGGTGACCCTTCTGCTCGCAGAAAACGTTTTAGAGATTGTTCTCGTGGACGC GTGATGAGACTGAGATAGAGTGATCAGATTTGAGCCCTCAGCGAAAAAGGGTTTATCTCGTCTTCAAATG TGGCTTCGAGGCTCGGGTTCTGGCGTGTACCTAAAATGCCCTTCTGTGAGCAGCTGGTGGTCTCTGAC CTACTAGACGATATACCATGTGCGGATGCAGTCTCGTGCAACATTGGCAGTAGATCTCTATGTGCGCT G
<b>Kinase Domain Sequence:</b>	>SC323514 kinase domain raw sequence. By performing <a href="#">BLASTX</a> analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation GARRAGTATTGGAGCAGGTGATTTGGTGAAGTTTGTAGTGGACGTTTGAACCTACCAGGAAAAAGAGAAT TACCTGTGGCTATCATGACCCTTAAAGTAGGCTATACTGAAAAGCAACGCAGAGATTTCTAGGTGAAGC AAGTATCATGGGACAGTTTATCATCTAACATCATCCATTTAGAAGGTGTGGTGACCAAAAGTAAACCA GTGATGATCGTGACAGAGTATATGGAGAATGGCTTTAGATACA
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_004439
<b>Insert Size:</b>	5100 bp
<b>OTI Disclaimer:</b>	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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <a href="#">Cell, 2008 May p536-548.</a>
<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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_004439.4</a> , <a href="#">NP_004430.3</a>
<b>RefSeq Size:</b>	8418 bp
<b>RefSeq ORF:</b>	3114 bp
<b>Locus ID:</b>	2044
<b>UniProt ID:</b>	<a href="#">P54756</a>
<b>Cytogenetics:</b>	4q13.1-q13.2
<b>Domains:</b>	kinase, EPH_lbd, TyrKc, SAM, S_TKc, FN3
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Axon guidance
<b>Gene Summary:</b>	<p>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]</p> <p>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.</p>