

Product datasheet for **SC323668**

Eph receptor A4 (EPHA4) (NM_004438) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A4 (EPHA4) (NM_004438) Human Untagged Clone
Tag:	Tag Free
Symbol:	Eph receptor A4
Synonyms:	EK8; HEK8; SEK; TYRO1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_004438, the custom clone sequence may differ by one or more nucleotides

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ATGGCTGGGATTTTCTATTTTCGCCCTATTTTCGTGTCTCTTCGGGATTTGCGACGCTGTCACAGTTCCA
GGGTATACCCCGGAATGAAGTTACCTTATTGGATTCCAGATCTGTTTCAGGGAGAAGTTGGGTGGATAGC
AAGCCCTCTGGAAGGAGGTGGGAGGAAGTGAGTATCATGGATGAAAAAATACACCAATCCGAACCTAC
CAAGTGTGCAATGTGATGGAACCCAGCCAGAATAACTGGCTACGAACTGATTGGATCACCCGAGAAGGGG
CTCAGAGGGTGTATATTGAGATTAATTCACCTTGAGGGACTGCAATAGTCTCCGGGCGTCATGGGGAC
TTGCAAGGAGACGTTTAACTGTACTACTATGAATCAGACAACGACAAAGAGCGTTTCATCAGAGAGAAC
CAGTTTGTCAAAATTGACACCATTGCTGCTGATGAGAGCTTCACCCAAGTGGACATTGGTGACAGAATCA
TGAAGCTGAACACCGAGATCCGGGATGTAGGGCCATTAAGCAAAAAGGGGTTTTACTGGCTTTTCAGGA
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CCTCAGAATACAGGTGGCCGCCAGGACATTTCTATAATGTGGTATGCAAGAAATGTGGAGCTGGTGACC
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CCGGATCATTGGAGATGGGGCTAACTCCACAGTCTTCTGGTCTGTCTCGGGCAGTGTGGTGTGGTG
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AGCAGTGGCAGAGTTTGCCAAAGAAATTGACGCATCCTGCATTAAGATTGAAAAAGTTATAGGAGTTGGT
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CTCTGAAAGCTGGTTATACAGACAAACAGAGGAGAGACTTCTGAGTGAGGCCAGCATCATGGGACAGTT
TGACCATCCGAACATCATTCACTTGAAGGCGTGGTCACTAAATGTAAACCAGTAATGATCATAACAGAG
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TATCGGTTACCCCTCCAATGGACTGCCCATTCGCTCCACCAGCTGATGCTAGACTGCTGGCAGAAGG
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TCTGCTGTGGTATCAGTGGGCGATTGGCTCCAGGCCATTAATGGACCGGTATAAGGATAAATTACAG
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AGCCATCAGCACCAGAATAAGATTTTGAGCAGTGTCCAGGCAATGCCAACCAATGCAGCAGATGCAC
GGCAGAATGGTCCCGTCTGA
    
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5' Read Nucleotide Sequence:	>OriGene 5' read for mutant NM_004438 unedited ACCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA CCGTCAGAATTTTGAATACGACTACTATAGGGCGGCCGCAATTCGGCAGGAGGGCAGCGTTGGCACC GGGAACCATGGCTGGGATTTTCTATTTTCGCCCTATTTTCGTGTCTCTTCGGGATTTGCGACGCTGCAC AGGTTCCAGGGTATACCCCGCAATGAAGTTACCTTATTGGATTCCAGATCTGTTCAAGGAGAAGTTGGG TGGATAGCAAGCCCTCTGGAAGGGAGGGTGGGAGGGAAGTGAGTATCATGGATGAAAAAATACACCA ATCCCGAACCTACCAAGTGTGGCAAATGTGATGGACCCAGCAAGAATTACCTGGGCTAACGGACCTGT GAATGGGATATCACCCGAGAAAGGGCTCTCAAAGGGTGTATTTTGGAGAATAAAAAATCACCCCTGAG AGGGACTGGCATTGTCCCTTCGGCCCGTCTGGGGACTTTGCAAGGAGACACGTTAAACTGGTCTACT ATTTAATTCAAAAACCGACCAAAAAAGCTTTTCATTCCAAAAAACCCATTTTGCCAAATTTACCCCT TGGGGGGTAAAAAGACTTTCCCAAGGGGACTTTGGGGAACAAACCTAAACCTAACCCGATTCCG GGGGTGGGGGCCTTTAACCAAGGGTTTACCCGGTTTTGAAGTGGGGGGCCCGCCCCCTGT TATCCCGGGGTTTTTAAAAAAGTGGCCACCAACCCATCATGGGCACTTTTTCGCGACCCCTCG GGGGGGTAAACTTTCTCGTGGGAGATATTAGCGCTCTGTGACACCCTACAAAAAAGTGTCCCAAT ATCTCGCGCAGAGAGTGATGGGTCTACTTCTGTGCACCATCACTGCGTAGGAGAGAACGAAGAAGAC ACTCTCGT
Kinase Domain Sequence:	>SC323668 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CCRRTGRGCATCTGCWTAGATTGAAAGTTATAGGAGTTGGTGAATTTGGTGAGGTATGCAGTGGGCGTC TCAAAGTGCCTGGCAAGAGAGAGATCTGTGTGGCTATCATGACTcTGAAAGCTGGTTATACAGACAAACA GAGGAGAGACTTCTGAGTGAGGCCAGCATCATGGGACAGTTTGACCATCCGAACATCATCACTTGGAA GGCGTGGTCACTAAATGTAACAGTAATGATCATAACAGAGTAC
Restriction Sites:	Please inquire
ACCN:	NM_004438
Insert Size:	3000 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 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:	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." Cell. 2008 May p536-548.
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_004438.3](#), [NP_004429.1](#)

RefSeq Size: 6364 bp

RefSeq ORF: 2961 bp

Locus ID: 2043

UniProt ID: [P54764](#)

Cytogenetics: 2q36.1

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. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2015]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1 and 2 both encode the same isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.