

Product datasheet for **SC323534**

Eph receptor A1 (EPHA1) (NM_005232) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A1 (EPHA1) (NM_005232) Human Untagged Clone
Tag:	Tag Free
Symbol:	Eph receptor A1
Synonyms:	EPH; EPHT; EPHT1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323534 sequence for NM_005232 edited (data generated by NextGen Sequencing)

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ATGGAGCGGCGCTGGCCCTGGGGCTAGGGCTGGTGTCTGTCTGCGCCCCGCTGCC
CCGGGGGCTCACGCCAAGGAAGTTACTCTGATGGACACAAGGCACAGGGAGAGCTG
GGCTGGCTGTGGATCCCCAAAAGATGGGTGGAGTGAACAGCAACAGATACTGAATGGG
ACACCCCTGTACATGTACCAGGACTGCCAATGCAAGGACGCAGAGACTGACCACTGG
CTTCGCTCCAATTGGATCTACCGCGGGGAGGAGGCTTCCCGCTCCACGTGGAGCTGCAG
TTCACCGTGCGGGACTGCAAGAGTTTCCCTGGGGGAGCCGGGCCCTCTGGGCTGCAAGGAG
ACCTTCAACCTTCTGTACATGGAGAGTGACCAGGATGTGGGCATTAGCTCCGACGGCCC
TTGTTCCAGAAGTAACACGGTGGCTGCAGACCAGAGCTTACCATTGAGACCTTGCG
TCTGGCTCCGTGAAGCTGAATGTGGAGCGCTGCTCTGGGCCGCTGACCCGCCGTGGC
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TACCAGCGCTGTCTGAGACCCTGAATGGCTTGGCCCAATCCCAGACTCTGCCTGGC
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CGGTGCCACTGTGAGCCTGGCTATGAGGAAGGTGGCAGTGGCGAAGCATGTGTTGCCTGC
CCTAGCGGCTCCTACCGGATGGACATGGACACACCCCATTTGTCTACGTGCCCCAGCAG
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CGCCAGGATGTCAGATACAGTGTGAGGTGTTCCAGTGTGAGGGCACAGCACAGGACGGG
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AGGCAACTAGAGTGCACCTGGCGGGGTCCCGGCCCGAAGCCCTGGGGCGAACCTGACC
TATGAGCTGCACGTGCTGAACCAGGATGAAGAACGGTACCAGATGTTCTAGAACCAGG

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GTCTTGCTGACAGAGCTGCAGCCTGACACCACATACATCGTCAGAGTCCGAATGCTGACC
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GACCTCCAGGCATACGAGGACCTGCACAGGGAGCCTTGGACTTACCCGGGAGCTTGAT
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ACCATGGAGTGTGTGCTGGAGCTGACCGCTGAGGACCTGACGCAGATGGGAATCACACTG
CCCGGGCACCCAGAAGCGCATTCTTTCAGTATTACAGGGATTCAAGGACTGA
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Clone variation with respect to NM_005232.4
 69 g=>t;71 g=>a;479 t=>c;1837 c=>t;1967 a=>t;2698 a=>g;2742 a=>g

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_005232 unedited
 ACGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTGTGAAC
 CGTCAGAAATTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCCCGGCTCTCCTAGT
 CCCTTGCAACCTGGCGCTGCCATCCGGGCCACTGTCCCAGGTCCCAGCCCGGAGCTATGGAGCGGCCTG
 GCCCTGGGGCTAGGGCTGGTGTGCTGCTGCTGCGCCCCGCTGCCCCGGGGGCTCACGCCAAGGAAGTT
 ACTCTGATGGACACAAGCAAGGGCACAGGGGAGAGCTGGGCTGGTGTGGATCCCCCAAAAGATGGGT
 GGAGTGAACAGCAACAGATACCTGGAATGGGACACCCCTGTAACATGTTACCAAGAACTGCCCAATG
 CCAAGGACGCCAAAACACTGGACCACTGGGCTTTGGCTCCCATTGGATTCTTACCAGGGGAAGAGAG
 GCTTTCCCGCTTCCCTTGAACCTTGCACTTCCCTGGGCGGAAATTCAGAAATTTCCCTGGGGGA
 AACCCGGGCCCTGGGGCTGCAGGGAACTTTAACCTTTTGTGAATTGGAAAAGAGCCCGAAATGGGGG
 TTACCTCCCAAAGGGCCCTTTGTCCCAAAGGGAAACCCAGGGGGTGTGAACACAAAATTTCCACTTTA
 GAACTTTGTCTGGGGTCCCAGAAATGAAATTGAAACCTGCTGCTTTTGGGCGCCCTACACCCCGCG
 GGGTCTTTCTACCTGCTTTTCCAACCCCGTGTCCGTTGTGTGGCGCTGGTGTGTGTGGGGTGTCTT
 CCACCGCTGTGCTGATAACCATGATAGAGTGTGTGCCACATTTAGAAACACTGCTGTGCCGCTGTTG
 TGTGAATAGCCGAAGCACATGTTCCACGCGGGCGACCACAGCCTAATGTGATCCCCAGACTCAAACAGT
 GGCATGATCTGTGCTCTTGACAGAGCCCCCTGGTCAGCTCGCTCGATATAGA

Kinase Domain Sequence:

>SC323534 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
 CGAWMGGCTGCTGWGGTGGMACTGTCATAGGAGAAGGAGAGTTTGGGGAAGTGTATCGAGGGACCCTGAG
 GCTCCCAGCCAGGACTGCAAGACTGTGGCCATTATGACCTTAAAAGACACATCCCCAGGTGGCCAGTGG
 TGGAATTCCTTCGAGAGGCAACTATCATGGGCCAGTTTAGCCACCCGCATATTTCTGCATCTGGAAGGCG
 TCGTCACAAAGCGAAAGCCGATCATGATCATCACAGAATTTATGG

Restriction Sites:

Please inquire

ACCN:	NM_005232
Insert Size:	3400 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).
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:	<ol style="list-style-type: none">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_005232.3 , NP_005223.3
RefSeq Size:	3369 bp
RefSeq ORF:	2931 bp
Locus ID:	2041
UniProt ID:	P21709
Cytogenetics:	7q34-q35
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. This gene is expressed in some human cancer cell lines and has been implicated in carcinogenesis. [provided by RefSeq, Jul 2008]