

Product datasheet for **SC121913**

Eph receptor A2 (EPHA2) (NM_004431) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A2 (EPHA2) (NM_004431) Human Untagged Clone
Tag:	Tag Free
Symbol:	Eph receptor A2
Synonyms:	ARCC2; CTPA; CTPP1; CTRCT6; ECK
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF:

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>OriGene ORF sequence for NM_004431 edited
ATGGAGCTCCAGGCAGCCCGCGCCTGCTTCGCCCTGCTGTGGGGCTGTGCGCTGGCCGG
GCCGCGCGGGCGCAGGGCAAGGAAGTGGTACTGCTGGACTTTGCTGCAGCTGGAGGGGAG
CTCGGCTGGCTCACACACCCGTATGGCAAAGGGTGGGACCTGATGCAGAACATCATGAAT
GACATGCCGATCTACATGTAACCTCGTGTCAACGTGATGTCTGGCAGCAGGACAAGTGG
CTCCGCACCAACTGGGTGTACCGAGGAGAGGCTGAGCGTATCTTCATTGAGCTCAAGTTT
ACTGTACGTGACTGCAACAGCTTCCCTGGTGGCGCCAGCTCCTGCAAGGAGACTTTCAAC
CTCTACTATGCCGAGTCGGACCTGGACTACGGCACCAACTTCCAGAAGCGCCTGTTACCC
AAGATTGACACCATTTGCGCCGATGAGATCACCGTCAGCAGCGACTTCGAGGCACGCCAC
GTGAAGCTGAACGTGGAGGAGCGCTCCGTGGGGCCGCTCACCCGCAAAGGCTTCTACCTG
GCCTTCCAGGATATCGGTGCCTGTGTGGCGCTGCTCTCCGTCCGTGTCTACTACAAGAAG
TGCCCCGAGCTGCTGCAGGGCCTGGCCACTTCCCTGAGACCATCGCCGGCTCTGATGCA
CCTTCCCTGGCCACTGTGGCCGGCACCTGTGTGGACCATGCCGTGGTCCACCGGGGGGT
GAAGAGCCCCGTATGCACTGTGCAGTGGATGGCGAGTGGCTGGTCCCATGGGCAGTGC
CTGTGCCAGGCAGGCTACGAGAAGGTGGAGGATGCCTGCCAGGCCTGCTCGCCTGGATTT
TTTAAGTTTGAGGCATCTGAGAGCCCTGCTTGGAGTGCCTGAGCACAGCTGCCATCC
CCTGAGGGTGCCACCTCTGCGAGTGTGAGGAAGGCTTCTCCGGGCACCTCAGGACCCA
GCGTCGATGCCTTGCACACGACCCCCCTCCGCCACACTACCTCACAGCCGTGGGCATG
GGTGCCAAAGTGGAGCTGCGCTGGACGCCCCCTCAGGACAGCGGGGGCCGCGAGGACATT
GTCTACAGCGTCACTGCGAACAGTGTGGCCCGAGTCTGGGGAATGCGGGCCGTGTGAG
GCCAGTGTGCGCTACTCGGAGCCTCCTCACGGACTGACCCGCACCAGTGTGACAGTGAGC
GACCTGGAGCCCCACATGAACTACACCTTACCCTGGAGGCCCGCAATGGCGTCTCAGGC
CTGGTAACCCAGCCGAGCTTCCGTACTGCCAGTGTGAGCATCAACCAGACAGAGCCCCC
AAGGTGAGGCTGGAGGGCCGACGACCACTCGCTTAGCGTCTCCTGGAGCATCCCCCG
CCGACGACAGCCGAGTGTGGAAGTACGAGGTCACCTACCGAAGAAGGGAGACTCCAAC
AGCTACAATGTGCGCCGACCGAGGGTTTCTCCGTGACCTGGACGACCTGGCCCCAGAC
ACCACCTACCTGGTCCAGGTGCAGGCACTGACGACGAGGGCCAGGGGGCCGCGACGAAG
GTGCACGAATCCAGACGCTGTCCCGGAGGGATCTGGCAACTTGGCGGTGATTGGCGGC
GTGGCTGTCGGTGTGGTCTGCTTCTGGTGTGGCAGGAGTTGGCTTCTTATCCACCGC
AGGAGGAAGAACCAGCGTGCCCCCAGTCCCCGGAGGACGTTTACTTCTCCAAGTCAGAA
CAACTGAAGCCCCTGAAGACATACGTGGACCCCCACACATATGAGGACCCCAACCAGGCT
GTGTTGAAGTTCACTACCGAGATCCATCCATCCTGTGCACTCGGCAGAAGGTGATCGGA
GCAGGAGAGTTTGGGGAGGTGTACAAGGCATGCTGAAGACATCCTCGGGGAAGAAGGAG
GTGCCGGTGGCCATCAAGACGCTGAAAGCCGGCTACACAGAGAAGCAGCGAGTGGACTTC
CTCGGCGAGGCCGGCATCATGGCCAGTTCAGCCACCACAACATCATCCGCCTAGAGGGC
GTCATCTCAAATACAAGCCATGATGATCATCACTGAGTACATGGAGAATGGGGCCCTG
GACAAGTTCCTTCGGGAGAAGGATGGCGAGTTCAGCGTGTGCACTGGTGGGCATGCTG
CGGGCATCGCAGCTGGCATGAAGTACCTGGCCAACATGAACTATGTGCACCGTGACCTG
GCTGCCCGCAACATCCTCGTCAACAGCAACCTGGTGTGCAAGGTGTCTGACTTTGGCCTG
TCCCGCGTGTGGAGGACGACCCCGAGGCCACCTACACCACAGTGGCGGCAAGATCCCC
ATCCGCTGGACCCCGGAGGCCATTTCTACCAGGAGTTCACCTCTGCCAGCGACGTG
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TTGTCAAACCACGAGGTGATGAAAGCCATCAATGATGGCTTCCGGCTCCCCACACCCATG
GACTGCCCTCCGCCATCTACCAGCTCATGATGCAGTGTGGCAGCAGGAGCGTGCCCGC
CGCCCCAAGTTCGCTGACATCGTCAGCATCCTGGACAAGCTCATTGTCGCCCTGACTCC
CTCAAGACCTGGCTGACTTTGACCCCCGCTGTCTATCCGGCTCCCAGCACGAGCGGC
TCGGAGGGGGTGCCTTCCGCACGGTGTCCGAGTGGCTGGAGTCCATCAAGATGCAGCAG
TATACGGAGCACTTCATGGCGGCGGCTACACTGCCATCGAGAAGTGGTGCAGATGACC
AACGACGACATCAAGAGGATTGGGGTGGCGCTGCCCGGCCACCAGAAGCGCATCGTCTAC
AGCCTGCTGGGACTCAAGGACCAGGTGAACACTGTGGGGATCCCCATCTGA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_004431 unedited
 GTTTTCACCCGCCGTTGNCGCATAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAA
 GCAGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTTGCAGCGGCCG
 CGAATTCGGCAGAGGGGCAGGAGGGGCAGAAGTTGCGCGCAGGCCGGCGGGCGGGAGCGG
 ACACCGAGGCCGGCGTGCAGGCGTGCGGGTGTGCGGGAGCCGGCTCGGGGGGATCGGAC
 CGAGAGCGAGAAGCGCGCATGGAGCTCCAGGCAGCCCGCCTGCTTCGCCCTGCTGTG
 GGGCTGTGCGCTGGCCCGCGCCGCGCGCAGGGCAAGGAAGTGGTACTGCTGGACTT
 TGCTGCAGCTGGAGGGGAGCTCGCTGGCTCACACACCCGTATGGCAAAGGGTGGGACCT
 GATGCAGAACATCATGAATGACATGCCGATCTACATGTACTCCGTGTGCAACGTGATGTC
 TGGCGACCAGGACAACCTGGCTCCGCACCAACTGGGTGTACCGAGGAGAGGCTGAGCGTAT
 CTTCAATTGAGCTCAAGTTTACTGTACGTGACTGCAACAGCTTCCCTGGTGGCGCCAGCTC
 CTGCAAGGAGACTTTCAACCTCTACTATGCCGAGTCGGACCTGGACTACGGCACCAACTT
 CCAGAAGCGCCTGTTACCAAGATTGACACCATTGCGCCCGATGAGATCACCGTCAGCAG
 CGACTTCGAGGCACGCCACGTGAAGCTGAACGTGGAGGAGCGCTCCGTGGGGCCGCTCAC
 CCGCAAAGGCTTNTACCTGCCTTNNCAGGATATCGTGCCTGTGTGGCGTGTCTCCGT
 CCGTGTCTACTACAAGAAGTGCCCCGAGCTGTGCAGGNCCTGGCCCACTTTCCTGAGAC
 ATCGNCGCTCTGATGCACCTCCCTGGCCCTGTGCCGACCTGTGTGAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_004431 unedited
 AACTGTGTACCGCGGCCCAATCTANNGATCGGTTTTTTTTTTTTTTTTTTTGAATATC
 TGCAACTTTATTCCAAAAGCAGAAATAAGTCATTTTCTAACAATAAATAAAAAAAAAATAA
 TAAATTAAGATTCGAAAAAATGTCCAACAAAACAAAATCTTTAACTGACAGAATAGA
 AACTTATCCAAAAGGATGAGAGATGGGGCCGACTGGGGCATGGGCAGGACTCCTCGCAG
 CACCGGTCCCTGAGTCCCAGCTCACGAATGTTTGACACCCTCTGTCCCCAGCCCTGGCG
 GGGCCCCCTGCCACACACACATTCTCTCCACAAAGTACAAAATATATATTTAAAAAACC
 TCAACACAACCAAGCATCTTGCAAAGGCCAGGAAAGCAAGGTTTGGCCAGTCAGGGAT
 GAGGATGGGGCCCGAGGGTCTAAAGAAGGCACTAGAGGGACAGGGACCGCTTGGGTCTC
 ACCCAGTCAAGTTCACAGTCTGCCCTCTAGTGTGAGGAAATGGGGCTTGAGGTACCCTG
 TTTACTTGGCGCTGGGCAAGCCCTCCATCTCCTGAGATGGCCTCATGTGGGAGAAGGCC
 GAGGGAAGGTGCGCTTGGGAATATCCTATATGTCTGTCCNGAGGCTGTGGCGGNGCTCCT
 GCTCCAGGGATGCTGGGACGTGGCGGTGCCTGCTAAGTGCTCAGCTGTGTGCGTCTCGCA
 GGGAAAGAGGNCAGCCAGCATCCCTGGGTCATCTCTCAGTTCAGGCCAGGGTGTGAT
 CCGAGACCCCTCAGCGGAAGTTGCGGGGGAGGAAAGAACTAGNAATNAATAAAGTCCCC
 AGTGGCCAGCATGGCCAGCAAGGAAGCCACTCTGTTTCTTCAAGTATTCTGGCCGATGG
 GGCTCCAGCCCTGCGAGCTCAAATGGGATCCCAACGTGTACCGGTCTTG

Restriction Sites:

NotI-NotI

ACCN:

NM_004431

Insert Size:

4000 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](#)

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_004431.2](#), [NP_004422.2](#)

RefSeq Size: 3970 bp

RefSeq ORF: 2931 bp

Locus ID: 1969

UniProt ID: [P29317](#)

Cytogenetics: 1p36.13

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. This gene encodes a protein that binds ephrin-A ligands. Mutations in this gene are the cause of certain genetically-related cataract disorders.[provided by RefSeq, May 2010]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). 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.