

Product datasheet for **RC600037**

Eph receptor A1 (EPHA1) (NM_005232) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A1 (EPHA1) (NM_005232) Human Tagged ORF Clone
Tag:	DDK-His
Symbol:	Eph receptor A1
Synonyms:	EPH; EPHT; EPHT1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RC600037 representing leader sequence plus the extracellular domain region of NM_005232

Red=Cloning site Blue=ORF Green=Tags(s)

GTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCTGGTACCGAGGAGATCCGCCGCCG
CGATCGCC

ATGGAGCGGCGCTGGCCCTGGGGCTAGGGCTGGTGTCTGCTGCTGCGCCCCGCTGCCCCGGGGGCGC
GCGCCAAGGAAGTTACTCTGATGGACACAAGCAAGGCACAGGGAGAGCTGGGCTGGCTGGTATCCCC
AAAAGATGGGTGGAGTGAACAGCAACAGATACTGAATGGGACACCCCTGTACATGTACCAGGACTGCCCA
ATGCAAGGACGCAGAGACTGACCACTGGCTTCGCTCCAATTGGATCTACCGGGGGAGGAGGCTTCCC
GCGTCCACGTGGAGCTGCAGTTCACCGTGCAGGACTGCAAGATTTCCCTGGGGAGCCGGGCTCTGGG
CTGCAAGGAGACCTTCAACCTTCTGTACATGGAGAGTACCAGGATGTGGGCATTAGCTCCGACGGCCC
TTGTTCCAGAAGTAACACGGTGGCTGCAGACCAGAGCTTACCATTGAGACCTTGTGTCTGGCTCCG
TGAAGCTGAATGTGGAGCGCTGCTCTGCGCCGCTGACCCGCGTGGCTCTACTCGCTTTCCACAA
CCCGGGTGCCTGTGTGGCCCTGGTGTCTGTCGGGTCTTCTACCAGCGCTGCTCTGAGACCTGAATGGC
TTGGCCCAATTCCAGACACTCTGCCTGGCCCCGCTGGGTTGGTGAAGTGGCGGGGACCTGCTTGGCCC
ACGCGCGGGCCAGCCCCAGGCCCTCAGGTGCACCCCGCATGCACTGCAGCCCTGATGGCGAGTGGCTGGT
GCCTGTAGGACGGTGCCACTGTGAGCCTGGCTATGAGGAAGTGGCAGTGGCGAAGCATGTGTTGCCTGC
CCTAGCGGCTCCTACCGGATGGACATGGACACACCCCAATTGTCTCACGTGCCCCAGCAGAGCACTGCTG
AGTCTGAGGGGGCCACCATCTGTACCTGTGAGAGCGGCCATTACAGAGCTCCCGGGGAGGGCCCCAGGT
GGCATGCACAGGTCCCCCTCGCCCCCGAAACCTGAGCTTCTCTGCCTCAGGGACTCAGCTTCCCTG
CGTTGGGAACCCCCAGCAGATACGGGGGGACGCCAGGATGTCAGATACAGTGTGAGGTGTTCCCATGTC
AGGGCACAGCACAGGACGGGGGGCCCTGCCAGCCCTGTGGGGTGGGCGTGCACCTTCTCGCCGGGGCCCG
GGGGCTACCCACACCTGCAGTGCATGTCAATGGCCTTGAACCTTATGCCAACTACACCTTAAATGTGGAA
GCCAAAATGGAGTGTGAGGGCTGGGCGCTCTGGCCATGCCAGCACCTCAGTCAGCATCAGCATGGGGC
ATGCAGAGTCACTGTGAGCCTGTCTCTGAGACTGGTGAAGAAAGAACCGAGGCAACTAGAGCTGACCTG
GGCGGGTCCCAGCCCCGAGCCCTGGGGCGAACCTGACCTATGAGCTGCACGTGCTGAACCAGGATGAA
GAACGGTACCAGATGGTTCTAGAACCAGGGTCTTGTCTGACAGAGCTGCAGCCTGACACCACATACATCG
TCAGAGTCCGAATGCTGACCCCACTGGTCTGGCCCTTCTCCCCTGATCATGAGTTTCGGACCAGCCC
ACCAGTGTCCAGGGCCCTGACTGGAGGAGAG

ACGCGTTCAGGGGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCTAATGAGATC
TGGTACCGATATCAAGCTTGTGACTCTAGA

Protein Sequence:

>RC600037 representing signal peptide plus the extracellular domain region of NM_005232

Red=Cloning sites Green= DDK and 6XHIS Tags

MERRWPLGLGLVLLLCAPLPPGARAKEVTLMDTSKAQGELGWLLDPPKDGWSEQQILNGTPLYMYQDCP
MQGRRDTHWLRSNWIYRGEEASRVHVELQFTVRDCKSFPGGAGPLGCKETFNLLYMESDQDVGILRRP
LFQKVTVAADQSFTIRDLVSGSVKLNVERCSLGRLLRRGLYLAFHNPACVALVSVRVFYQRCPETLNG
LAQFPDTLPGPAGLVEVAGTCLPHARASPRPSGAPRMHCSPDGEWLVPVGRCHCEPGYEEGSGEACVAC
PSGSYRMDMDTPHCLTCPQQSTAESEGATICTCESGHYRAPGEGPQVACTGPPSAPRNLFSASGTQLSL
RWEPPADTGGRQDVRYSVRCSQCQGT AQDGGPCQPCGVGVHFS PGARGLTTPAVHVNGLEPYANYTFNVE
AQNGVSLGSSGHASTSVSISMGHAESLSGLSLRLVKKEPRQLEL TWAGSRPRSPGANLTYELHVLNQDE
ERYQMVLEPRVLLTELQPDTTYIVRVRMLTPLGPGPSPDHEFRTPSPVSRGLTGGE

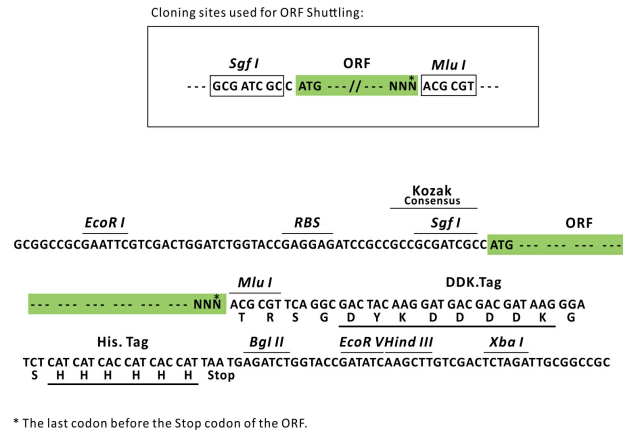
TRSGTRSGDYKDDDDKGSHHHHHH

Chromatograms:

https://cdn.origene.com/chromatograms/mk8117_f02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_005232

ORF Size: 1641 bp

OTI Disclaimer: 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 clone was engineered to express the extra cellular domain of the protein with an expression tag. Expression varies depending on the nature of the gene.

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_005232.4](#), [NP_005223.4](#)

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
MW:	59.2 kDa
Gene Summary:	<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. This gene is expressed in some human cancer cell lines and has been implicated in carcinogenesis. [provided by RefSeq, Jul 2008]</p>