

## Product datasheet for RC239907

### Eph receptor A5 (EPHA5) (NM\_001281765) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A5 (EPHA5) (NM_001281765) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EPHA5
Synonyms:	CEK7; EHK-1; EHK1; EK7; HEK7; TYRO4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC239907 representing NM_001281765 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGGGGCTCGGGGCCCGGGGTGCGGGACGCCGGCGGCCCAAGCGGGCGGGCGACACCCCATCA  
CCCCAGCGTCCCTGGCCGGCTGCTACTCTGCACCTCGACGGGCTCCCTCTGGACGTGCCTTCTCCTGTG  
CGCCGACTCCGGACCCTCCTGGCCAGCCCAGCAACGAAGTGAATTTATTGGATTACGCACTGTCATG  
GGGACCTGGGATGGATTGCTTTTCCAAAAATGGGTGGGAAGAGATTGGTGAAGTGATGAAAAATTATG  
CCCTATCCACACATACCAAGTATGCAAAAGTATGGAACAGAATCAGAATAACTGGCTTTTGACCAGTTG  
GATCTCCAATGAAGGTGCTTCCAGAATCTTCATAGAACTCAAATTTACCTGCGGGACTGCAACAGCCTT  
CCTGGAGGACTGGGACCTGTAAGGAACTTTAATATGTATTACTTTGAGTCAGATGATCAGAATGGGA  
GAAACATCAAGGAAAACCAATACATCAAATGATACCATTGCTGCCGATGAAAGCTTTACAGAACTTGA  
TCTTGGTGACCGTGTATGAAACTGAATACAGAGGTACAGAGATGATAGGACCTCTAAGCAAAAAGGGATT  
TATCTTGCTTTTCAAGATGTTGGTGCTTGCAATTGCTCTGGTTCTGTGCGTGTATACTATAAAAAATGCC  
CTTCTGTGGTACGACACTTGGCTGTCTCCCTGACACCATCACTGGAGCTGATTCTTCCCAATGCTCGA  
AGTGTCAGGCTCCTGTGCAACCATTCTGTGACCGATGAACCTCCAAAAATGCACTGCAGCGCCGAAGGG  
GAGTGGCTGGTGCCCATCGGAAATGCATGTGCAAGGCAGGATATGAAGAGAAAAATGGCACCTGTCAAG  
TGTGCAGACCTGGGTTCTTCAAAGCCTCACCTCACATCCAGAGCTGCGGCAAAATGCCACCTCACAGTTA  
TACCCATGAGGAAGCTTCAACCTCTTGTGTCTGTGAAAAGGATTATTCAGGAGAGAGTCTGATCCACCC  
ACAATGGCATGCACAAGACCCCCCTCTGCTCCTCGGAATGCCATCTCAAATGTTAATGAACTAGTGTCT  
TTCTGGAATGGATTCCGCTGCTGACACTGGTGGAAAGGAAAGACGTGCATATTATTGCATGCAAGAA  
GTGCAACTCCCATGCAGGTGTGTGAGGAGTGTGGCGGTATGTCAGGTACCTTCCCCGCAAAGCGGC  
CTGAAAAACACCTCTGTCATGATGGTGGATCTACTCGCTCACACAACTATACCTTTGAGATTGAGCGAG  
TGAATGGAGTGTCCGACTTGAGCCAGGAGCCCGCAGTATGTGTCTGTAATGTAACCAAAATCAAGC  
AGCTCCATCTCCAGTCACCAATGTGAAAAAGGAAAAATTGCAAAAAACGCATCTCTTTGTCTTGCA  
GAACCAGATCGTCCCAATGGAATCATCCTAGAGTATGAAATCAAGTATTTGAAAAGGACCAAGAGACCA



[View online >](#)

GCTACACGATTATCAAATCTAAAGAGACAAC TATTACTGCAGAGGGCTTCAAACAGCTTCAGTTTATGT  
 CTTCCAAATTCGAGCACGTACAGCAGCAGGCTATGGTGTCTTCAGTCGAAGATTTGAGTTTCAAACACC  
 CCAGTGTGAGTTCGAGCATCCAGCGATCAAAGCCAGATTCCTGTAATTGCTGTGTCTGTGACAGTGGGAG  
 TCATTTTGTGGCAGTGGTTATCGGCGTCTCCTCAGTGGAAAGTTGCTGCGAATGTGGCTGTGGGAGGGC  
 TTCTTCCCTGTGCGCTGTGCCATCCAAGCCTAATATGGCGGTGTGGCTACAGCAAAGCAAAACAAGAT  
 CCAGAAGAGAAAAGATGCATTTTCATAATGGGCACATTAAGTCCAGGAGTAAGAAGTACATTGATC  
 CACATACCTATGAGGATCCCAATCAAGCTGCCACGAATTTGCTAAGGAGATAGAAGCATCATGTATCAC  
 CATTGAGAGAGTTATTGGAGCAGGTGAATTTGGTGAAGTTTGTAGTGGAGTTTGAAGTACCAGGAAAA  
 AGAGAATTACCTGTGGCTATCAAAACCCTTAAAGTAGGCTATACTGAAAAGCAACGCAGAGATTTCTAG  
 GTGAAGCAAGTATCATGGGACAGTTTATCATCTAACATCATCCATTTAGAAGGTGTGGTGACCAAAAAG  
 TAAACAGTGTGATCGTGACAGAGTATATGGAGAATGGCTCTTTAGATACATTTTGAAGAAAAACGAT  
 GGGCAGTTCAGTGTGATTGAGCTTGTGGCATGCTGAGAGGTATCTCTGCAGGAATGAAGTACCTTTCTG  
 ACATGGGCTATGTGCATAGAGATCTTGTGCCAGAAACATCTTAATCAACAGTAACCTTGTGTGCAAAGT  
 GTCTGACTTTGGACTTTCCGGGTACTGGAAGATGATCCCAGGCAGCCTACACCACAAGGGGAGGAAAA  
 ATTCAAATCAGATGGACTGCCCCAGAAGCAATAGCTTTCCGAAAGTTTACTTCTGCCAGTGTGCTGGA  
 GTTATGGAATAGTAATGTGGGAAGTTGTGTCTTATGGAGAGAGACCCACTGGGAGATGACCAATCAAGA  
 TGTGATTAAGCGGTAGAGGAAGGCTATCGTCTGCCAAGCCCCATGGATTGCTCTGCTCTCTATCAG  
 TTAATGCTGGATTGCTGGCAGAAAGAGCGAAATAGCAGGCCCAAGTTTGTGAAATAGTCAACATGTTGG  
 ACAAGCTGATACGTAACCAAGTGTCTGAAGACGCTGGTTAATGCATCTGCAGAGTATCTAATTTATT  
 GGCAGAACATAGCCACTAGGATCTGGGCGCTACAGATCAGTAGGTGAATGGCTAGAGGCAATCAAGATG  
 GGCCGGTATACAGAGATTTTATGGAATGGATACAGTTCAATGGACGCTGTGGCTCAGGTGACCTTGG  
 AGGATTTGAGACGGCTTGGAGTGACTCTTGTGGTACCAGAGAAGATCATGAACAGCCTTCAAGAAAT  
 GAAGGTGCAGCTGGTAAACGGAATGGTGCCATTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC239907 representing NM\_001281765  
 Red=Cloning site Green=Tags(s)

MRGSGPRGAGRRRPPSGGGDTPITPASLAGCYSAPRRAPLWTCLLLCAALRLLASPSNEVNLDSRTVM  
 GDLGWIAFPKNGWEEIGEVDENYAPIHTYQVCKVMEQNQNNWLLTSWISNEGASRIFIELKFTLRDCNSL  
 PGGTGTCKETFMYYFESDDQNGRNIKENQYIKIDTIAADESFTELDLGDVVMKLNTEVRDVGPLSKKGF  
 YLAFQDVGACIALVSVRYYYKCPVVRHLAVFPDITGADSSQLLEVSGSCVNHVSTDEPPKMHCSAEG  
 EWLVPVIGKCMCKAGYEEKNGTCQVCRPGFFKASPHIQSCGKCPPHSYTHEEASTSCVCEKDYFRRESPP  
 TMACTRPPSAPRNAISNVNETSVFLEWIPPADTGGRKDVSYIACKKCNHAGVCEECGGHVRYLPRQSG  
 LKNTSVMVDLLAHTNYTFEIEAVNGVSDLSGARQYVSVNVTNQAAPSPVTNVKKGKIAKNSISLSWQ  
 EPDRPNGIILEYEIKYFEKDQETSYYTIKSKETTITAEGLKPASVYVVFQIRARTAAGYGVFSRRFEFETT  
 PVSVAASSDQSQIPVIAVSVTVGVILLAVVIGVLLSGSCCECGGRASSLCAVAHPSLIWRCGYSKAKQD  
 PEEKMHFHNGHIKLPVVRTYIDPHYEDPNQAVHEFAKIEASCITIERVIGAGEFGEVCSGRLLKLPK  
 RELPVAIKTLKVGYTEKQRRDFLGEASIMGQFDHPNIIHLEGVVTKSKPVMIVTEYMENGLDFTFLKND  
 GQFTVIQLVGMLRGISAGMKYLSDMGYVHRDLAARNILINSNLVCKVSDFLSRVLEDDPEAAAYTRGGK  
 IPIRWTAPEAIAFRKFTSASDVSYGIVMWEVSYGERPYWEMTNQDVIKAVEEGYRLPSPMDCPAALYQ  
 LMLDCWQKERNRPFDEIVNMLDKLIRNPSSLKTLVNASCRVSNLLAEHSPLGSGAYRSVGEWLEAIKM  
 GRYTEIFMENGYSMDAVAQVTLLEDLRLGVTLVGHQKIMNSLQEMKVQLVNGMVPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI



<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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>	<u><a href="#">NM_001281765.2</a></u> , <u><a href="#">NP_001268694.1</a></u>
<b>RefSeq Size:</b>	8421 bp
<b>RefSeq ORF:</b>	3117 bp
<b>Locus ID:</b>	2044
<b>UniProt ID:</b>	<u><a href="#">P54756</a></u>
<b>Cytogenetics:</b>	4q13.1-q13.2
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Axon guidance
<b>MW:</b>	115.3 kDa
<b>Gene Summary:</b>	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]