

## Product datasheet for RC239885

### Eph receptor A5 (EPHA5) (NM\_001281766) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A5 (EPHA5) (NM_001281766) 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:	>RC239885 representing NM_001281766 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGCGGGGCTCGGGGCCCGGGGTGCGGGACGCCGGCGGCCCAAGCGGGCGGGCGACACCCCATCA  
CCCCAGCGTCCCTGGCCGGCTGCTACTCTGCACCTCGACGGGCTCCCCTCTGGACGTGCCTTCTCCTGTG  
CGCCGACTCCGGACCCTCCTGGCCAGCCCAGCAACGAAGTGAATTTATTGGATTACGCACTGTCATG  
GGGACCTGGGATGGATTGCTTTTCCAAAAATGGGTGGGAAGAGATTGGTGAAGTGGATGAAAAATTATG  
CCCTATCCACACATACCAAGTATGCAAAAGTATGGAACAGAATCAGAATAACTGGCTTTTGACCAGTTG  
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CCTGGAGGACTGGGACCTGTAAGGAAACCTTTAATATGTATTACTTTGAGTCAGATGATCAGAATGGGA  
GAAACATCAAGGAAAACCAATACATCAAATGATACCATTGCTGCCGATGAAAGCTTTACAGAACTTGA  
TCTTGGTGACCGTGTATGAAACTGAATACAGAGGTACAGAGATGATAGGACCTCTAAGCAAAAAGGGATTT  
TATCTTGCTTTTCAAGATGTTGGTGCTTGCAATTGCTCTGGTTTCTGTGCGTGTATACTATAAAAAATGCC  
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ACAATGGCATGCACAAGACCCCTCTGCTCCTCGGAATGCCATCTCAAATGTTAATGAACTAGTGTCT  
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GAACCAGATCGTCCCAATGGAATCATCCTAGAGTATGAAATCAAGTATTTGAAAAGGACCAAGAGACCA



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GCTACACGATTATCAAATCTAAAGAGACAACACTATTACTGCAGAGGGCTTCAAACCAGCTTCAGTTTATGT  
 CTTCCAAATTCGAGCACGTACAGCAGCAGGCTATGGTGTCTTCAGTCGAAGATTTGAGTTTCAAACCACC  
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 AAATGAAGGTGCAGCTGGTAAACGGAATGGTCCATTG

ACGCGTACGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGAT AAGTTTAA

**Protein Sequence:**

>RC239885 representing NM\_001281766  
 Red=Cloning site Green=Tags(s)

MRGSGPRGAGRRRPPSGGGDTPITPASLAGCYSAPRRAPLWTCLLLCAALRLLASPSNEVNLDSRTVM  
 GDLGWIAFPKNGWEEIGEVDENYAPIHTYQVCKVMEQNQNNWLLTSWISNEGASRIFIELKFTLRDCNSL  
 PGGLTCKETFMYYFESDDQNGRNIKENQYIKIDTIAADESFTLDELGDRVMKLNTEVRDVGPLSKKGF  
 YLAFQDVGACIALVSVRVYKCPVVRHLAVFPDITGADSSQLLEVSGSCVNHSVTDEPPKMHCSAEG  
 EWLVPIGKCMCKAGYEEKNGTCQVCRPGFFKASPHIQSCGKCPPHSYTHEEASTSCVCEKDYFRRES DPP  
 TMACTRPPSAPRNAISNVNETSVFLEWIPPADTGGRKDVSYIACKKCNHAGVCEECGGHVRYLPRQSG  
 LKNTSVMVDLLAHTNYTFEIEAVNGVSDLSPGARQYVSVNVTNQAAPSPVTNVKKGKIAKNSISLSWQ  
 EPDRPNGIILEYEIKYFEKQETSYYTIKSKETTITAEGKLPASVYVFQIRARTAAGYGVFSRRFEFETT  
 PVSVAASSDQSQIPVIAVSVTVGVILLAVVIGVLLSGRRCGYSKAQDPEEEKMHFNHNGHIKLPVVRTYI  
 DPHTYEDPNQAVHEFAKEIEASCITIERVIGAGEFGEVCSGRLKLPKRELPAIKTLKVGYTEKQRRDF  
 LGEASIMQFDHPNIIHLEGVVTKSKPVMIVTEYMENGLDFTLKKNDGQFTVIQLVGMRLGISAGMKYL  
 SDMGYVHRDLAARNILINSNLVCKVSDFLSRVLEDDPEAAYTTRGGKIPIRWTAPEAIAFRKFTASDV  
 WSYGIVMWEVVSYGERPYWEMTNQDVIKAVEEGYRLPSPMDCPAALYQLMLDCWQKERNRSPKFDEIVNM  
 LDKLIRNPSSLKTLVNASCVRNLLAEHSPLGSGAYRSVGEWLEAIKMGRYTEIFMENGYSMDAVAQVT  
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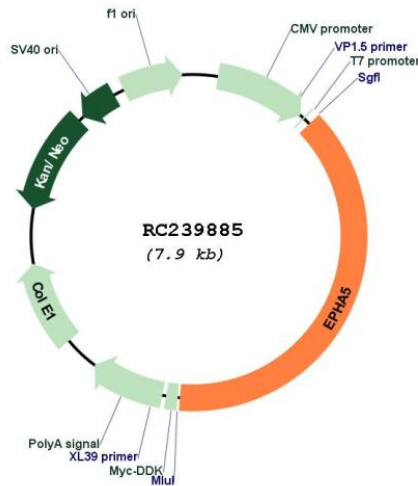
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001281766

ORF Size: 3048 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](#)

<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_001281766.2</a></u> , <u><a href="#">NP_001268695.1</a></u>
<b>RefSeq Size:</b>	8355 bp
<b>RefSeq ORF:</b>	3051 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>	113.1 kDa
<b>Gene Summary:</b>	<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. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Aug 2013]</p>