

## Product datasheet for **RC600044**

### Eph receptor A7 (EPHA7) (NM\_004440) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A7 (EPHA7) (NM_004440) Human Tagged ORF Clone
Tag:	DDK-His
Symbol:	Eph receptor A7
Synonyms:	EHK-3; EHK3; EK11; HEK11
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC600044 representing leader sequence plus the extracellular domain region of NM\_004440

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

GTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCTGGTACCGAGGAGATCCGCCGCCG  
CGATCGCC

ATGGTTTTTCAAACCTCGGTACCTTCATGGATTATTTTATGCTACATCTGGCTGCTCCGCTTTGCACACA  
CAGGGGAGGCGCAGGCTGCGAAGGAAGTACTACTGCTGGATTCTAAAGCACAACAACAGAGTTGGAGTG  
GATTTCTCTCCACCCAATGGGTGGGAAGAAATTAGTGGTTTGGATGAGAACTATAACCCCGATACGAACA  
TACCAGGTGTGCCAAGTCATGGAGCCCAACAAAACTGGCTGCGGACTAACTGGATTCCAAAGGCA  
ATGCACAAAGGATTTTTGTAGAATTGAAATTCACCCTGAGGGATTGTAACAGTCTTCTGGAGTACTGGG  
AACTTGAAGGAAACATTAATTTGACTATTATGAAACAGACTATGACACTGGCAGGAATAAAGAGAA  
AACCTCTATGAAAAATAGACACCATTGCTGCAGATGAAAGTTTTACCCAAGTGACCTTGGTGAAGAA  
AGATGAAGCTTAACACTGAGGTGAGAGAGATTGGACCTTTGTCCAAAAAGGGATTCTATCTTGCCTTCA  
GGATGTAGGGGCTTGCATAGCTTTGGTTTCTGTCAAAGTGTACTACAAGAAGTGCTGGTCCATTATTGAG  
AACTTAGCTATCTTCCAGATACAGTACTGGTTCAGAATTTTCTCTTTAGTCGAGGTTGAGGGACAT  
GTGTCAGCAGTGCAGAGGAAGAAGCGGAAAACGCCCCAGGATGCACTGCAGTGCAGAAGGAGAATGGTT  
AGTGCCCATTTGAAAAATGTATCTGCAAAGCAGGCTACCAGCAAAAAGGAGACACTTGTGAACCTGTGGC  
CGTGGGTTCTACAAGTCTTCTCTCAAGATCTTCAGTGTCTCGTTGTCCAACCTCACAGTTTTTCTGATA  
AAGAAGGCTCTCCAGATGTGAATGTGAAGATGGGTATTACAGGGCTCCATCTGACCCACCATACGTTGC  
GTGCACAAGGCCCTCCATCTGCACCACAGAACCTCATTTTCAACATCAACCAAAACCACAGTAAAGTTGGAA  
TGGAGCTCTCTGCAGACAATGGGGGAAGAAACGATGTGACCTACAGAATATTGTGTAAGCGGTGCAGTT  
GGGAGCAGGGCGAATGTGTTCCCTGTGGGAGTAACATTGGATACATGCCCCAGCAGACTGGATTAGAGGA  
TAACTATGCTACTGTCATGGACCTGCTAGCCACGCTAATTATACTTTTGAAGTTGAAGCTGTAATGGA  
GTTTCTGACTTAAGCCGATCCCAGAGGCTCTTGTGCTGTCAGTATCACCAGTGGTCAAGCAGCTCCCT  
CGCAAGTGAAGGAGTGAAGGAGAGAGTACTGCAGCGGAGTGTGAGCTTCTGCGCAGGAACCAGA  
GCATCCCAATGGAGTCATCACAGAATATGAAATCAAGTATTACGAGAAAGATCAAAGGGAACGGACCTAC  
TCAACAGTAAAAACCAAGTCTACTTCAGCTCCATTAATAATCTGAAACCAGGAACAGTGTATGTTTTCC  
AGATTCGGGCTTTTACTGCTGCTGGTTATGAAATTACAGTCCCAGACTGATGTTGCTACTACTAGAGGA  
AGCTACAGGTAATAATGTTTGAAGCTACAGCTGTCTCCAGTGAACAGAATCCTGTT

ACGCGTTCAGGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAATGAGATC  
TGGTACCGATATCAAGCTTGTGACTCTAGA

**Protein Sequence:**

>RC600044 representing signal peptide plus the extracellular domain region of NM\_004440

Red=Cloning sites Green= DDK and 6XHIS Tags

MVFQTRYPSWIILCYIWLLRFAHTGEAQAQAEVLLLDLSKAQQTELEWISSPPNGWEEISGLDENYTPIRT  
YQVCQVMEPNQNNWLRNWNISKNAQRIFVELKFTLRDCNSLPGVLGTCKETFNLYYYETDYDTGRNIRE  
NLVYKIDTIAADESFTQGDGERKMKLNTEVREIGPLSKKGFYLAQDVGACIALVSVKVVYKCKWSIE  
NLAIFPDTVTGSEFSSLVEVRGTCVSSAEAEAENAPRMHCSAEGEWLVPIGKICKAGYQQKQKGTCEPCG  
RGFYKSSSQDLQCSRCPTHSFSDKEGSSRCECEDGYRAPSDPPYVACTRPPSAPQNLIFNINQTTVSLE  
WSPPADNGGRNDVTYRILCKRCSWEQGEVPCGSNIGYMPQQTGLEDNVYTVMDLLAHANYTFEVEAVNG  
VSDLRSQRFLAAVSITGQAAPSQVSGVMKERVLRQSVELSWQEPHPNGVITEYEIKYYEKDQRETTY  
STVKTKSTSASINNLKPGTVYVYFQIRAFATAAGYGNYSRPLDVATLEEATGKMFATVASEQNVPV

TRSGTRSGDYKDDDDKGSHHHHHH

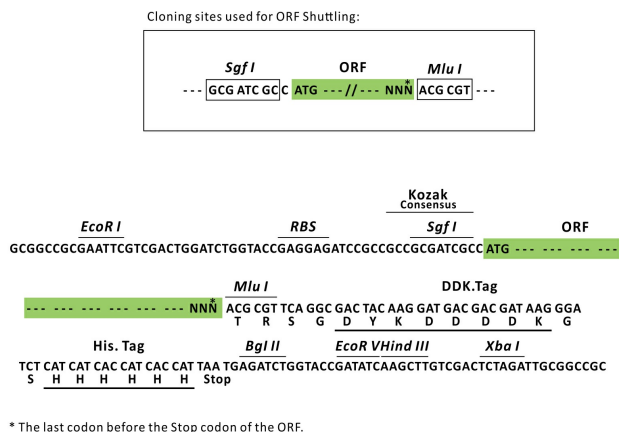
**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8117\\_f09.zip](https://cdn.origene.com/chromatograms/mk8117_f09.zip)

**Restriction Sites:**

Sgfl-Mlul

### Cloning Scheme:



**ACCN:** NM\_004440

**ORF Size:** 1665 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](mailto: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](#)

**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:	<a href="#">NM_004440.3</a> , <a href="#">NP_004431.1</a>
RefSeq Size:	6644 bp
RefSeq ORF:	2997 bp
Locus ID:	2045
UniProt ID:	<a href="#">Q15375</a>
Cytogenetics:	6q16.1
Domains:	pkinase, EPH_lbd, TyrKc, SAM, S_TKc, FN3
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Axon guidance
MW:	62.3 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. Increased expression of this gene is associated with multiple forms of carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2013]</p>