

Product datasheet for **RC600041**

Eph receptor A4 (EPHA4) (NM_004438) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor A4 (EPHA4) (NM_004438) Human Tagged ORF Clone
Tag:	DDK-His
Symbol:	Eph receptor A4
Synonyms:	EK8; HEK8; SEK; TYRO1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5-DDK-His (PS100068)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RC600041 representing leader sequence plus the extracellular domain region of NM_004438

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

GTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCTGGTACCGAGGAGATCCGCCGCCG
CGATCGCC

ATGGCTGGGATTTTCTATTTTCGCCCTATTTTCGTGCTCTTCGGGATTTGCGACGCTGTACAGGTTCCA
GGGTATACCCCGGAATGAAGTTACCTTATTGGATTCCAGATCTGTTCCAGGGAGAAGTTGGTGGATAGC
AAGCCCTCTGGAAGGAGGGTGGGAGGAAGTGAGTATCATGGATGAAAAAATACACCAATCCGAACCTAC
CAAGTGTGCAATGTGATGGAACCCAGCCAGAATAACTGGCTACGAACTGATTGGATCACCCGAGAAGGGG
CTCAGAGGGTGTATTTGAGATTAATTCACCTTGAGGGACTGCAATAGTCTCCGGGCGTCATGGGGAC
TTGCAAGGAGACGTTTAACTGTACTACTATGAATCAGACAACGACAAAGAGCGTTTCATCAGAGAGAAC
CAGTTTGTCAAATTTGACACCATTGCTGCTGATGAGAGCTTCACCCAAGTGGACATTGGTACAGAAATCA
TGAAGCTGAACACCGAGATCCGGGATGTAGGGCCATTAAGCAAAAAGGGGTTTTACTGGCTTTTCAGGA
TGTGGGGGCGCTGCATCGCCCTGGTATCAGTCCGTGTGTTCTATAAAAAGTGTCCACTCACAGTCCGCAAT
CTGGCCAGTTTCTGACACCATCACAGGGGCTGATACGTCTTCCCTGGTGAAGTTCGAGGCTCCTGTG
TCAACAACTCAGAAGAGAAAAGTGTGCCAAAAATGACTGTGGGGCAGATGGTGAATGGCTGGTACCCAT
TGGCAACTGCCTATGCAACGCTGGGCAAGAGGAGCGGAGCGGAGAATGCCAAGCTTGCAAAAATGGATAT
TACAAGGCTCTCTCCACGGATGCCACCTGTGCCAAGTGCCACCCACAGCTACTCTGTCTGGGAAGGAG
CCACCTCGTGACCTGTGACCGAGGCTTTTTCAGAGCTGACAACGATGCTGCCTCTATGCCCTGCACCCG
TCCACCATCTGCTCCCTGAACTTGATTTCAAATGTCAACGAGACATCTGTGAAGTTGGAATGGAGTACG
CCTCAGAATACAGGTGGCCGCCAGGACATTTCTATAATGTGGTATGCAAGAAAATGTGGAGCTGGTACCC
CCAGCAAGTGCCGACCCTGTGGAAGTGGGGTCCACTACACCCACAGCAGAATGGCTTGAAGACCACCAA
AGTCTCCATCACTGACCTCCTAGCTCATACCAATTACACCTTTGAAATCTGGGCTGTGAATGGAGTGCC
AAATATAACCCTAACCCAGACCAATCAGTTTCTGTCACTGTGACCACCAACCAAGCAGCACCATCATCCA
TTGCTTTGGTCCAGGCTAAAGAAGTCAAGATACAGTGTGGCACTGGCTGGCTGGAACAGATCGGCC
CAATGGGGTAATCCTGGAATATGAAGTCAAGTATTATGAGAAGGATCAGAATGAGCGAAGCTATCGTATA
GTTCCGACAGCTGCCAGGAACACAGATATCAAAGGCTGAACCTCTCACTTCTATGTTTTCCACGTGC
GAGCCAGGACAGCAGCTGGCTATGGAGACTTCAGTGAGCCCTGGAGGTTACAACCAACACAGTGCCTTC
CCGGATCATTGGAGATGGGGCTAACTCCACA

ACGCGTTCAGGGCGACTACAAGGATGACGACGATAAGGGATCTCATCATCACCATCACCATTAATGAGATC
TGGTACCGATATCAAGCTTGTGCACTCTAGA

Protein Sequence:

>RC600041 representing signal peptide plus the extracellular domain region of NM_004438

Red=Cloning sites Green= DDK and 6XHIS Tags

MAGIFYFALFSCLFGICDAVTGSRVYPANEVTL L DSRVQGELGWIASPLEGGWEEVSIMDEKNTPIRTY
QVCNMEPSQNNWLRTDWITREGAQRVYIEIKFTLRDCNSLPGVMGTCKETFNLYYYESDNDKERFIREN
QFVKIDTIAADESFTQVDIGDRIMKLNTEIRDVGPLSKKGFYLAQFDVGACIALVSVRVFYKCCPLTVRN
LAQFPDITGADTSSLVEVRGSCVNNSEEKDVPKMYCGADGEWLVPIGNCLCNAGHEERSGECQACKIGY
YKALSTDATCAKPPHSYSVWEGATSCTCDRGFFRADNDAASMPCTRPPSAPLNLISNVNETSVNLEWSS
PQNTGGRQDISYNNVCKKCGAGDPSKCRPCGSGVHYTPQQNGLKTTKVSITDLLAHTNYTFEIVAVNGVS
KYNPNPDQSVSVTVTTNQAAPSSIALVQAKEVTRYSVVALAWLEPDRPNGVILEYEVKYYEKDQNERYSRI
VRTAARNTDIKGLNPLTSYVFHVRARTAAAGYGFSEPLEVTTNTVPSRIIGDGANST

TRSGTRSGDYKDDDDKGSHHHHHH

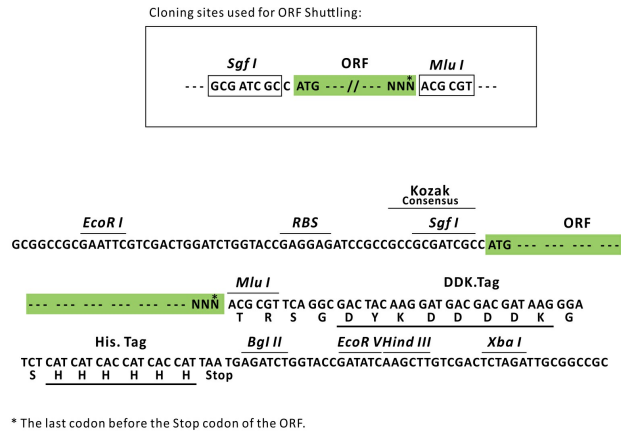
Chromatograms:

https://cdn.origene.com/chromatograms/mk8117_f06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_004438

ORF Size: 1641 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](#)

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_004438.3 , NP_004429.1
RefSeq Size:	6364 bp
RefSeq ORF:	2961 bp
Locus ID:	2043
UniProt ID:	P54764
Cytogenetics:	2q36.1
Domains:	pkinase, EPH_lbd, TyrKc, SAM, S_TKc, FN3
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Axon guidance
MW:	60.5 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. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2015]</p>