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Product datasheet for RC211230

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:	Myc-DDK
Symbol:	Eph receptor A4
Synonyms:	EK8; HEK8; SEK; TYRO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC211230 representing NM_004438
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGGGATTTTCTATTTCGCCCTATTTTCGTGTCTCTTCGGGATTTGCGACGCTGTCACAGGTTCCA
GGGTATACCCCGCGAATGAAGTTACCTTATTGGATTCCAGATCTGTTCAGGGAGAACTTGGGTGGATAGC
AAGCCCTCTGGAAGGAGGGTGGGAGGAAGTGAGTATCATGGATGAAAAAAATACACCAATCCGAACCTAC
CAAGTGTGCAATGTGATGGAACCCAGCCAGAATAACTGGCTACGAACTGATTGGATCACCCGAGAAGGGG
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CAGTTTGTCAAAATTGACACCATTGCTGCTGATGAGAGCTTCACCCAAGTGGACATTGGTGACAGAATCA
TGAAGCTGAACACCGAGATCCGGGATGTAGGGCCATTAAGCAAAAAGGGGTTTTACCTGGCTTTTCAGGA
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CAATGGGGTAATCCTGGAATATGAAGTCAAGTATTATGAGAAGGATCAGAATGAGCGAAGCTATCGTATA

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GTTCGGACAGCTGCCAGGAACACAGATATCAAAGGCCTGAACCCTCTCACTTCCTATGTTTTCCACGTGC
GAGCCAGGACAGCAGCTGGCTATGGAGACTTCAGTGAGCCCTTGGAGGTTACAACCAACACAGTGCCTTC
CCGGATCATTGGAGATGGGGCTAACTCCACAGTCCTTCTGGTCTCTGTCTCGGGCAGTGTGGTGCTGGTG
GTAATTCTCATTGCAGCTTTTGTCATCAGCCGGAGACGGAGTAAATACAGTAAAGCCAAACAAGAAGCGG
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TATCGGTTACCCCCTCCAATGGACTGCCCCATTGCGCTCCACCAGCTGATGCTAGACTGCTGGCAGAAGG
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TCTGCTGTGGTATCAGTGGGCGATTGGCTCCAGGCCATTAAAATGGACCGGTATAAGGATAACTTCACAG
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GGCAGAATGGTTCCCGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211230 representing NM_004438
Red=Cloning site Green=Tags(s)

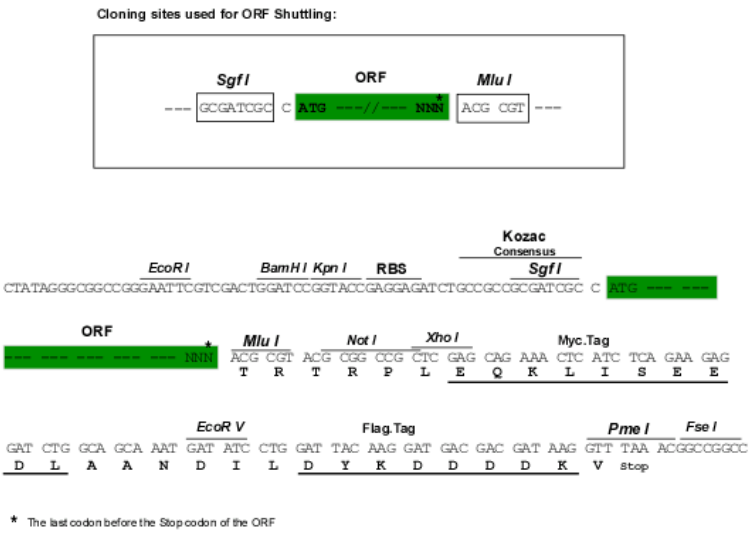
MAGIFYFALFSCLFGICDAVTGSRVYPANEVTLLDSRSVQGELGWIASPLEGGWEEVSIMDEKNTPIRTY
QVCNVMEPSQNNWLRTDWITREGAQRVYIEIKFTLRDCNSLPGVMGTCKETFNLYYYESDNDKERFIREN
QFVKIDTIAADESFTQVDIGDRIMKLNTEIRDVGPLSKKGFYLAFQDVGACIALVSVRVFYKKCPLTVRN
LAQFPDTITGADTSSLVEVRGSCVNNSEEKDVPKMYCGADGEWLVPIGNCLCNAGHEERSGECQACKIGY
YKALSTDATCAKCPPHSYSVWEGATSCTCDRGFFRADNDAASMPCTRPPSAPLNLISNVNETSVNLEWSS
PQNTGGRQDISYNVVCKKCGAGDPSKCRPCGSGVHYTPQQNGLKTTKVSITDLLAHTNYTFEIWAVNGVS
KYNPNPDQSVSVTVTTNQAAPSSIALVQAKEVTRYSVALAWLEPDRPNGVILEYEVKYYEKDQNERSYRI
VRTAARNTDIKGLNPLTSYVFHVRARTAAGYGDFSEPLEVTTNTVPSRIIGDGANSTVLLVSVSGSVVLV
VILIAAFVISRRRSKYSKAKQEADEEKHLNQGVRTYVDPFTYEDPNQAVREFAKEIDASCIKIEKVIGVG
EFGEVCSGRLKVPGKREICVAIKTLKAGYTDKQRRDFLSEASIMGQFDHPNIIHLEGVVTKCKPVMIITE
YMENGSLDAFLRKNDGRFTVIQLVGMLRGIGSGMKYLSDMSYVHRDLAARNILVNSNLVCKVSDFGMSRV
LEDDPEAAYTTRGGKIPIRWTAPEAIAYRKFTSASDVWSYGIVMWEVMSYGERPYWDMSNQDVIKAIEEG
YRLPPPMDCPIALHQLMLDCWQKERSDRPKFGQIVNMLDKLIRNPNSLKRTGTESSRPNTALLDPSSPEF
SAVVSVGDWLQAIKMDRYKDNFTAAGYTTLEAVVHVNQEDLARIGITAITHQNKILSSVQAMRTQMQQMH
GRMVPV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2867_g02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004438

ORF Size: 2958 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.

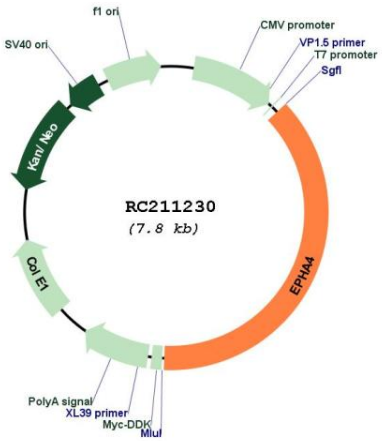
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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 complete ORF with an expression tag. Expression varies depending on the nature of the gene.

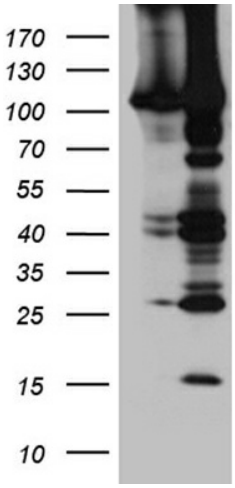
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_004438.5
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:	109.7 kDa
Gene Summary:	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]

Product images:



Circular map for RC211230



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EPHA4 (Cat# RC211230, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EPHA4 rabbit polyclonal antibody (Cat# [TA890117]).