

Product datasheet for RC210411

Ephrin A5 (EFNA5) (NM_001962) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephrin A5 (EFNA5) (NM_001962) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ephrin A5
Synonyms:	AF1; EFL5; EPLG7; GLC1M; LERK7; RAGS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210411 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGCACGTGGAGATGTTGACGCTGGTGTCTGGTCTGGATGTGTGTTCAGCCAGGACCCGG
GCTCCAAGGCCGTCGCCGACCGCTACGCTGTCTACTGGAACAGCAGCAACCCAGATTCCAGAGGGGTGA
CTACCATATTGATGTCTGTATCAATGACTACCTGGATGTTTTCTGCCCTCACTATGAGGACTCCGCCCCA
GAAGATAAGACTGAGCGCTATGCCTCTACATGGTGAACTTTGATGGCTACAGTGCCTGCGACCACACTT
CCAAAGGGTTCAAGAGATGGGAATGTAACCGGCCTCACTCTCAAATGGACCGCTGAAGTTCTCTGAAAA
ATTCCAGCTCTTCACTCCCTTTCTCTAGGATTTGAATTCAGGCCAGGCCGAGAATATTTCTACATCTCC
TCTGCAATCCCAGATAATGGAAGAAGGTCTGTCTAAAGCTCAAAGTCTTTGTGAGACCAACAAATAGCT
GTATGAAAATATAGGTGTTTCATGATCGTGTTCATGATGTTAACGACAAAGTAGAAAATTCATTAGAACC
AGCAGATGACACCGTACATGAGTCAGCCGAGCCATCCCGCGGCGAGAACGCGGCACAAACACCAAGGATA
CCCAGCCGCTTTTGGCAATCCTACTGTTCTCTGCGGATGCTTTTGACATTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210411 protein sequence
Red=Cloning site Green=Tags(s)

MLHVEMLTLVFLVLMCVFSQDPGSKAVADRYAVYWSSNPRFQRGDYHIDVCINDYLDVFCPHYEDSVPE
 EDKTERYVLYMVNFDGYSACDHTSKGFKRWECNRPHSPNGPLKFSEKQLFTPFSLGFEFRPGREYFYIS
 SAIPDNGRRSCLKLVFVRPTNSCMKTIQVHDRVFDVNDKVENSLPADDTVHESAEP SRGENAAQT PRI
 PSRLLAILLFLLAMLLTL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6234_c04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001962

ORF Size: 684 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](#)

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001962.3](#)

RefSeq Size: 5335 bp

RefSeq ORF: 687 bp

Locus ID: 1946

UniProt ID: [P52803](#)

Cytogenetics: 5q21.3

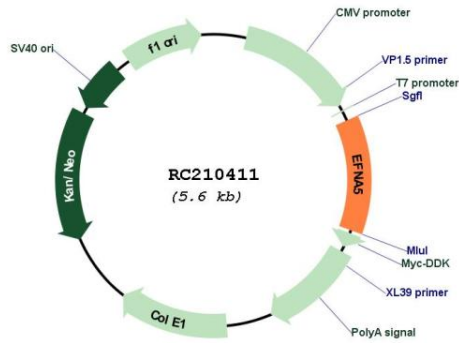
Protein Families: Druggable Genome

Protein Pathways: Axon guidance

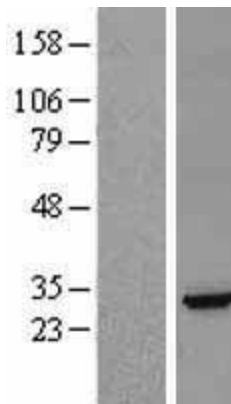
MW: 26.3 kDa

Gene Summary: Ephrin-A5, a member of the ephrin gene family, prevents axon bundling in cocultures of cortical neurons with astrocytes, a model of late stage nervous system development and differentiation. The EPH and EPH-related receptors comprise the largest subfamily of receptor protein-tyrosine kinases and have been implicated in mediating developmental events, particularly in the nervous system. EPH receptors typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin ligands and receptors have been named by the Eph Nomenclature Committee (1997). Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. The Eph family of receptors are similarly divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC210411



Western blot validation of overexpression lysate (Cat# [LY419623]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210411 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).