

## Product datasheet for RC212122

### Ephrin A1 (EFNA1) (NM\_182685) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ephrin A1 (EFNA1) (NM\_182685) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Ephrin A1  
**Synonyms:** B61; ECKLG; EFL1; EPLG1; GMAN; LERK-1; LERK1; TNFAIP4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC212122 representing NM\_182685  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGTTCCTCTGGGCCCTCTCTGGGTCTGTGCTGCAGTCTGGCCGCTGCTGATCGCCACACCGTCT  
TCTGGAACAGTTCAAATCCCAAGTTCGGGAATGAGGACTACACCATACATGTGCAGCTGAATGACTACGT  
GGACATCATCTGTCGCACTATGAAGATCACTCTGTGGCAGACGCTGCCATGGAGCAGTACATACTGTAC  
CTGGTGGAGCATGAGGAGTACCAGCTGTGCCAGCCCCAGTCCAAGGACCAAGTCCGCTGGCAGTGAACC  
GGCCCAGTGCCAAGCATGGCCCGAGAAGCTGTCTGAGAAGTTCAGCGCTTACACCTTTCACCCTGGG  
CAAGGAGTTCAAAGAAGGACACAGCTACTACTACATCTCTCACAGTCTCAGGCCATGTCAATCCACAG  
GAGAAGAGACTTGACAGCAGATGACCCAGAGGTGCGGGTCTACATAGCATCGGTACAGTCTGCCCCAC  
GCCTCTTCCCACTTGCTGGACTGTGCTCTCTCCACTTCTGCTGCTGCAAACCCG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC212122 representing NM\_182685  
Red=Cloning site Green=Tags(s)  
MEFLWAPLLGLCCSLAAADRHTVFNSSNPFRNEDYTIHVQLNDYVDIICPHYEDHSVADAAMEQYILY  
LVEHEEYQLCQPQSKDQVRWQCNRPSAKHGPEKLSKFRFTPF TLGKEFKEGHSYYYISHSPQAHVNPQ  
EKRLAADDPEVRVLHSIGHSAAPRLFPLAWTVLLLLPLLLLQTP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6487\\_a05.zip](https://cdn.origene.com/chromatograms/mk6487_a05.zip)



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_182685

ORF Size: 549 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.

RefSeq: [NM\\_182685.1](#), [NP\\_872626.1](#)

RefSeq Size: 1524 bp

RefSeq ORF: 552 bp

Locus ID: 1942

UniProt ID: [P20827](#)

**Cytogenetics:** 1q22

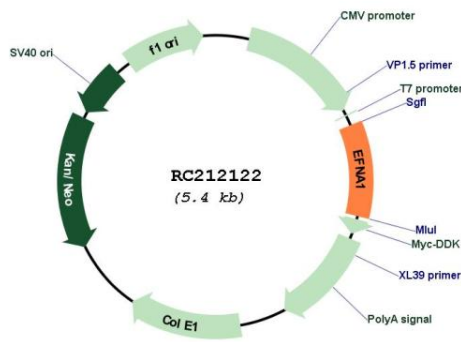
**Protein Families:** Druggable Genome

**Protein Pathways:** Axon guidance

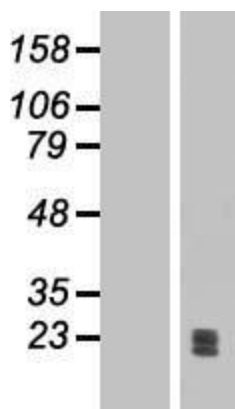
**MW:** 19.3 kDa

**Gene Summary:** This gene encodes a member of the ephrin (EPH) family. The ephrins and EPH-related receptors comprise the largest subfamily of receptor protein-tyrosine kinases and have been implicated in mediating developmental events, especially in the nervous system and in erythropoiesis. 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. This gene encodes an EFNA class ephrin which binds to the EPHA2, EPHA4, EPHA5, EPHA6, and EPHA7 receptors. Two transcript variants that encode different isoforms were identified through sequence analysis. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC212122



Western blot validation of overexpression lysate (Cat# [LY405448]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212122 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).