

Product datasheet for **RG213728**

Ephrin A2 (EFNA2) (NM_001405) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephrin A2 (EFNA2) (NM_001405) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ephrin A2
Synonyms:	ELF-1; EPLG6; HEK7-L; LERK-6; LERK6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213728 representing NM_001405 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCCCGCGCAGCGCCCGTCTCCCGTCTGCTCCTGCTGTTACCGCTGCCGCCGCCGCCCTTCG
CGCGCGCCGAGGACGCCCGCCCGCCAACCTCGGACCGCTACGCCGTCTACTGGAACCGCAGCAACCCAG
GTTCCACGCAGGCGGGGGACGACGGCGGGGGTACACGGTGGAGGTGAGCATCAATGACTACCTGGAC
ATCTACTGCCCGCACTATGGGGCGCCGCTGCCCGCCGCGAGCGCATGGAGCACTACGTGCTGTACATGG
TCAACGGCGAGGGCCACGCCTCCTGCGACCACCGCCAGCGGGCTCAAGCGCTGGGAGTGCAACCGGCC
CGCGGCGCCCGGGGGCCGCTCAAGTTCGCGAGAAGTTCAGCTCTTACGCCCTTCTCCCTGGGCTTC
GAGTTCGGGCCCGCCACGAGTATTACTACATCTCTGCCACGCCTCCCAATGCTGTGGACCGGCCCTGCC
TGCGACTGAAGGTGTACGTGCGGCCGACCAACGAGACCCTGTACGAGGCTCCTGAGCCCATCTTCACCAG
CAATAACTCGTGTAGCAGCCCGGGCGGCTGCCGCCTTCTCCTCAGCACCATCCCCGTGCTCTGGACCCTC
CTGGGTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG213728 representing NM_001405
 Red=Cloning site Green=Tags(s)

MAPAQRPLLPLLLLLLPLPPPPFARAEDAARANSRDYAVYWNRSNPRFHAGAGDDGGGYTVEVSINDYLD
 IYCPHYGAPLPPAERMEHYVL YMVNNEGHASCDHRQRFKRWECNRPAAPGGPLKFSEKQLFTPFSLGF
 EFRPGHEYYYYISATPPNAVDRPCLRLKVVYVPTNETLYEAPEPIFTSNNSCSPGGCRLFLSTIPVLWTL
 LGS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001405

ORF Size: 639 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_001405.4](#)

RefSeq Size: 642 bp

RefSeq ORF: 642 bp

Locus ID: 1943

UniProt ID: [O43921](#)

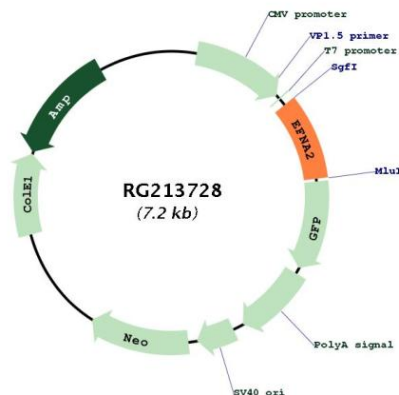
Cytogenetics: 19p13.3

Protein Families: Druggable Genome

Protein Pathways: Axon guidance

Gene Summary: This gene encodes a member of the ephrin family. The protein is composed of a signal sequence, a receptor-binding region, a spacer region, and a hydrophobic region. 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. 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. Posttranslational modifications determine whether this protein localizes to the nucleus or the cytoplasm. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG213728