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Product datasheet for RC220133

Ephrin B2 (EFNB2) (NM_004093) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephrin B2 (EFNB2) (NM_004093) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ephrin B2
Synonyms:	EPLG5; Htk-L; HTKL; LERK5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC220133 representing NM_004093
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGTGAGAAGGGACTCCGTGTGGAAGTACTGCTGGGGTGTTTTGATGGTTTTATGCAGAACTGCGA
TTTCCAAATCGATAGTTTTAGAGCCTATCTATTGGAATTCCTCGAACTCCAAATTTCTACCTGGACAAGG
ACTGGTACTATACCCACAGATAGGAGACAAATTGGATATTATTTGCCCCAAAGTGGACTCTAAAACTGTT
GGCCAGTATGAATATTATAAAGTTTATATGGTTGATAAAGACCAAGCAGACAGATGCACTATTAAGAAGG
AAAATACCCCTCTCCTCAACTGTGCCAAACCAGACCAAGATATCAAATTCACCATCAAGTTTCAAGAATT
CAGCCCTAACCTCTGGGGTCTAGAATTTCAGAAGAACAAAGATTATTACATTATATCTACATCAAATGGG
TCTTTGGAGGGCCTGGATAACCAGGAGGGAGGGGTGTGCCAGACAAGAGCCATGAAGATCCTCATGAAAG
TTGGACAAGATGCAAGTTCTGCTGGATCAACCAGGAATAAAGATCCAACAAGACGTCCAGAACTAGAAGC
TGGTACAAATGGAAGAAGTTCGACAACAAGTCCCTTTGTAAAACCAAATCCAGGTTCTAGCACAGACGGC
AACAGCGCCGGACATTCGGGGAACAACATCCTCGGTTCCGAAGTGGCCTTATTTGCAGGGATTGCTTCAG
GATGCATCATCTTCATCGTCATCATCATCACGCTGGTGGTCCTCTTGCTGAAGTACCGGAGGAGACACAG
GAAGCACTCGCCGCAGCACACGACCACGCTGTCGCTCAGCACACTGGCCACACCCAAGCGCAGCGGCAAC
AACAACGGCTCAGAGCCCAGTGACATTATCATCCCGCTAAGGACTGCGGACAGCGTCTTCTGCCCTCACT
ACGAGAAGGTCAGCGGGGACTACGGGCACCCGGTGTACATCGTCCAGGAGATGCCCCCGCAGAGCCCGGC
GAACATTTACTACAAGGTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC220133 representing NM_004093
Red=Cloning site Green=Tags(s)

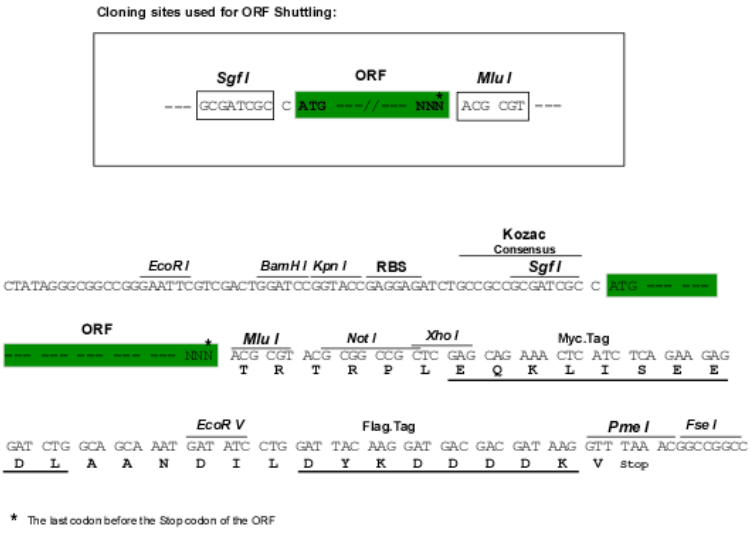
MAVRRDSVWKYCWGVLMVLCRTAISKSIVLEPIYWNSSNSKFLPGQGLVLYPQIGDKLDIICPKVDSKTV
GQYEYYKVYMVDKDQADRCTIKKENTPLLNCAKPDQDIKFTIKFQEFSPNLWGLEFQKNKDYYIISTSNG
SLEGLDNQEGGVCQTRAMKILMKVGQDASSAGSTRNKDPTRRPELEAGTNGRSSTTSPFVKPNPGSSTDG
NSAGHSGNNILGSEVALFAGIASGCIIFIVIIITLVVLLLKYRRRHRKHSPQHTTTLSLSTLATPKRSGN
NNGSEPSDIIIPLRTADSVFCPHYEKVSGDYGHPVYIVQEMPPQSPANIYYKV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6094_e11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004093

ORF Size: 999 bp

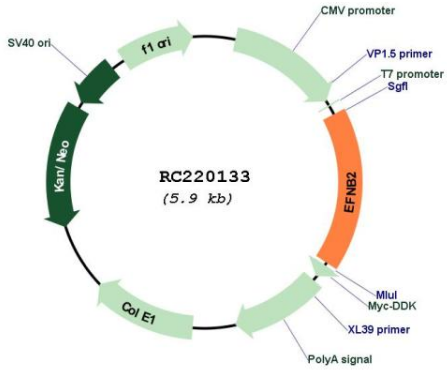
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

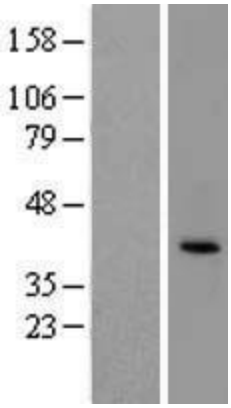
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_004093.4
RefSeq Size:	4335 bp
RefSeq ORF:	1002 bp
Locus ID:	1948
UniProt ID:	P52799
Cytogenetics:	13q33.3
Domains:	Ephrin
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Axon guidance
MW:	36.7 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 EFNB class ephrin which binds to the EPHB4 and EPHA3 receptors. [provided by RefSeq, Jul 2008]

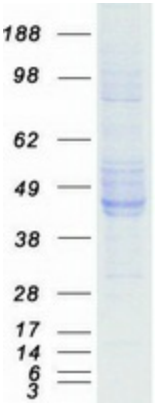
Product images:



Circular map for RC220133



Western blot validation of overexpression lysate (Cat# [LY418220]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220133 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EFNB2 protein (Cat# [TP320133]). The protein was produced from HEK293T cells transfected with EFNB2 cDNA clone (Cat# RC220133) using MegaTran 2.0 (Cat# [TT210002]).