

Product datasheet for MR202737

Efna5 (NM 207654) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Efna5 (NM_207654) Mouse Tagged ORF Clone

Tag: Myc-DDK Symbol: Efna5

Synonyms: AL-1; AV158822; EFL-5; Ephrin-A5; Epl7; LERK-7; RAGS

Mammalian Cell Neomycin

Selection:

ORF Nucleotide

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL) >MR202737 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGTTGCACGTGGAGATGTTGACGCTGCTCTTTCTGGTGCTCTGGATGTGTGTTCAGCCAGGACCCGG GCTCCAAAGTCGTCGCCGACCGCTACGCCGTCTACTGGAACAGCAGCAACCCCAGATTCCAGAGGGGTGA CTACCACATTGATGTCTGTATCAATGACTACCTGGATGTTTTCTGCCCTCACTATGAGGACTCTGTCCCA GAAGACAAGACTGAGCGCTACGTCCTGTACATGGTGAATTTTGATGGGTACAGTGCCTGCGACCACGT CCAAAGGGTTCAAGAGATGGGAATGTAACCGGCCTCACTCCCCAAACGGACCGCTGAAGTTCTCGGAAAA ATTCCAGCTCTTCACTCCCTTTTCTTTAGGATTTGAATTCAGGCCAGGCCGAGAGTATTTCTACATCTCC TCTGCAATCCCAGACAACGGAAGAAGGTCCTGTCTAAAGCTCAAAGTCTTTGTGAGACCAACAAATAGCT GTATGAAAACTATAGGTGTTCATGATCGTGTTTTCGATGTTAACGACAAAGTAGAAAATTCATTAGAACC AGCAGATGACACCGTACATGAGTCAGCCGAGCCATCCCGCGGTGAGAACGCGGCGCAGACACCAAGGATA CCCAGCCGCCTTTTGGCAATCCTACTGTTCCTCCTGGCGATGCTTTTGACATTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Protein Sequence: >MR202737 protein sequence

Red=Cloning site Green=Tags(s)

MLHVEMLTLLFLVLWMCVFSQDPGSKVVADRYAVYWNSSNPRFQRGDYHIDVCINDYLDVFCPHYEDSVP EDKTERYVLYMVNFDGYSACDHTSKGFKRWECNRPHSPNGPLKFSEKFQLFTPFSLGFEFRPGREYFYIS SAIPDNGRRSCLKLKVFVRPTNSCMKTIGVHDRVFDVNDKVENSLEPADDTVHESAEPSRGENAAQTPRI PSRLLAILLFLLAMLLTL

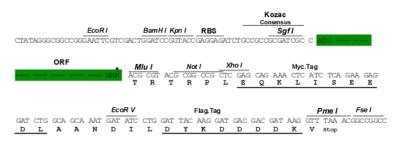
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_207654

ORF Size: 687 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: <u>NM 207654.2</u>, <u>NP 997537.1</u>

RefSeq Size: 5259 bp
RefSeq ORF: 687 bp
Locus ID: 13640
UniProt ID: 008543

Cytogenetics: 17 32.57 cM

MW: 26.3 kDa

Gene Summary: Cell surface GPI-bound ligand for Eph receptors, a family of receptor tyrosine kinases which

are crucial for migration, repulsion and adhesion during neuronal, vascular and epithelial development. Binds promiscuously Eph receptors residing on adjacent cells, leading to contact-dependent bidirectional signaling into neighboring cells. The signaling pathway downstream of the receptor is referred to as forward signaling while the signaling pathway

downstream of the ephrin ligand is referred to as reverse signaling. Induces

compartmentalized signaling within a caveolae-like membrane microdomain when bound to the extracellular domain of its cognate receptor. This signaling event requires the activity of the Fyn tyrosine kinase. Activates the EPHA3 receptor to regulate cell-cell adhesion and cytoskeletal organization. With the receptor EPHA2 may regulate lens fiber cells shape and interactions and be important for lens transparency maintenance. May function actively to

stimulate axon fasciculation. The interaction of EFNA5 with EPHA5 also mediates

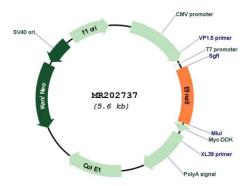
communication between pancreatic islet cells to regulate glucose-stimulated insulin secretion.

Cognate/functional ligand for EPHA7, their interaction regulates brain development

modulating cell-cell adhesion and repulsion.[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR202737