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Product datasheet for SC119267

Ephrin B3 (EFNB3) (NM_001406) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ephrin B3 (EFNB3) (NM_001406) Human Untagged Clone
Tag:	Tag Free
Symbol:	Ephrin B3
Synonyms:	EFL6; EPLG8; LERK8
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_001406 edited
GCCTTAGCCCGCTGCCCTCAATCCCAGCGAGGCTGGGGCTCCGGCTCGGCGCCCCCTTCC
TCGCTCCCTGGTCCGGCGCCCCATGCCGCCCCCGCCCGGTCCCCGGCTCCCCCAGTCCCC
CACTTAGGCGGGCTCACAGATCCCGGGGTGCTGGCGCGTGGGCCGGGGGCGCGTAGGGCG
CCTGCAGACGGCCCCTGGAAGGGCTCTGGTGGGGCTGAGCGCTCTGCCGCGGGGGCGCGG
GCACAGCAGGAAGCAGGTCCGCGTGGGCGCTGGGGGCATCAGCTACCGGGGTGGTCCGGG
CTGAAGAGCCAGGCAGCCAAGGCAGCCACCCCGGGGGGTGGGCGACTTTGGGGGAGTTGG
TGCCCCGCCCCCCAGGCCTTGGCGGGGTCATGGGGCCCCCCCATTCTGGGCCGGGGGGCG
TGCGAGTCGGGGCCCTGCTGCTGCTGGGGGTTTTGGGGCTGGTGTCTGGGCTCAGCCTGG
AGCCTGTCTACTGGAACTCGGCGAATAAGAGGTTCCAGGCAGAGGGTGGTTATGTGCTGT
ACCCTCAGATCGGGGACCGGCTAGACCTGCTCTGCCCCCGGGCCCGGCCTCCTGGCCCTC
ACTCCTCTCCTAATTATGAGTTCTACAAGCTGTACCTGGTAGGGGGTGCTCAGGGCCGGC
GCTGTGAGGCACCCCCTGCCCCAAACCTCCTTCTCACTTGTGATCGCCCAGACCTGGATC
TCCGCTTCACCATCAAGTTCCAGGAGTATAGCCCTAATCTCTGGGGCCACGAGTTCCGCT
CGCACCACGATTACTACATCATTGCCACATCGGATGGGACCCGGGAGGGCCTGGAGAGCC
TGCAGGGAGGTGTGTGCCTAACCAGAGGCATGAAGGTGCTTCTCCGAGTGGGACAAAGTC
CCCGAGGAGGGGCTGTCCCCCGAAAACCTGTGTCTGAAATGCCCATGGAAAGAGACCGAG
GGGCAGCCCACAGCCTGGAGCCTGGGAAGGAGAACCTGCCAGGTGACCCCACCAGCAATG
CAACCTCCCGGGGTGCTGAAGGCCCCCTGCCCCCTCCCAGCATGCCTGCAGTGGCTGGGG
CAGCAGGGGGGCTGGCGCTGCTCTTGCTGGGCGTGGCAGGGGCTGGGGGTGCCATGTGTT
GGCGGAGACGGCGGGCCAAGCCTTCGGAGAGTCGCCACCCTGGTCCTGGCTCCTTCGGGA
GGGGAGGGTCTCTGGGCCTGGGGGGTGGAGGTGGGATGGGACCTCGGGAGGCTGAGCCTG
GGGAGCTAGGGATAGCTCTGCGGGGTGGCGGGGCTGCAGATCCCCCCTTCTGCCCCCACT
ATGAGAAGGTGAGTGGTGACTATGGGCATCCTGTGTATATCGTGCAGGATGGGCCCCCCC
AGAGCCCTCCAAACATCTACTACAAGGTATGAGGGCTCCTCTCACGTGGCTATCCTGAAT
CCAGCCCTTCTTGGGGTGCTCCTCCAGTTTAATTCCTGGTTTGAGGGACACCTCTAACAT
CTCGGCCCCCTGTGCCCCCCCAGCCCCTTCACTCCTCCCGGCTGCTGTCCTCGTCTCCAC
TTTTAGGATTCCTTAGGATTCCCACTGCCCCACTTCCTGCCCTCCCGTTTGGCCATGGGT
GCCCCCCTCTGTCTCAGTGTCCCTGGATCCTTTTTCCTTGGGGAGGGGCACAGGCTCAGC
CTCCTCTCTGACCATGACCCAGGCATCCTTGTCCCCCTCACCCACCCAGAGCTAGGGGCG
GGAACAGCCCACCTTTTGGTTGGCACCGCCTTCTTTCTGCCTCTCACTGGTTTTCTCTTC
TCTATCTCTTATTCTTTCCCTCTCTTCCGTCTCTAGGTCTGTTCTTCTTCCCTAGCATCC
TCCTCCCCACATCTCCTTTCACCCTCTTGGCTTCTTATCCTGTGCCTCTCCCATCTCCTG
GGTGGGGGCATCAAAGCATTTCTCCCCTTAGCTTTCAGCCCCCCTTCTGACCTCTCATAC
CAACCACTCCCCTCAGTCTGCCAAAAATGGGGGCCTTATGGGGAAAGCTCTGACACTCCA
CCCCAGCTCAGGCCATGGGCAGCAGGGCTCCATTCTCTGGGCCTGGGCCAAGCCTCTACA
TACTTACTCCA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001406 unedited
TGTTCACATTTGTATACGACTCATATAGGCGGCACGCGAATTCGCACGAGGCCTTAGCCC
GCTGCCCTCAATCCCAGCGAGGCTGGGGCTCCGGCTCGGCGCCCCCTTCCTCGCTCCCTG
GTCCGGCGCCCCATGCCGCCCCCGCCCGGTCCCCGGCTCCCCCAGTCCCCCACTTAGGCG
GGCTCACAGATCCCGGGGTGCTGGCGCGTGGGCCGGGGGCGCGTAGGGCGCCTGCAGACG
GCCCCTGGAAGGGCTCTGGTGGGGCTGAGCGCTCTGCCGCGGGGGCGCGGGCACAGCAGG
AAGCAGGTCCGCGTGGGCGCTGGGGGCATCAGCTACCGGGGTGGTCCGGGCTGAAGAGCC
AGGCAGCCAAGGCAGCCACCCCGGGGGGTGGGCGACTTTGGGGGAGTTGGTGCCCCGCCC
CCCAGGCCTTGGCGGGGTCATGGGGCCCCCCCATTCTGGGCCGGGGGGCGTGCGAGTCGG
GGCCCTGCTGCTGCTGGGGGTTTTGGGGCTGGTGTCTGGGCTCAGCCTGGAGCCTGTCTA
CTGGAACTCGGCGAATAAGAGGTTCCAGGCAGAGGGTGGTTATGTGCTGTACCCTCAGAT
CGGGGACCGGCTAGACCTGCTCTGCCCCCGGGCCCGGCCTCCTGGCCCTCACTCCTCTCC
TAATTATGAGTTCTACAAGCTGTACCTGTAAGGGGGGTGCTCANGGNCCGGCGCTGTGAT
GCACCCCCTGCCCCAAACCTCCTTCTCACTTGTGATCGCCCAGACCTGGATCTCCGCTTC
ACCATCAAGTTCCAGGAGTATAGCCCTAATCTCTGGGGCCACGAGTTCCGCTCGCACCAC
GATTACTACATCATTGCCCACATCGGATGGGACCCCGGGGAGGGCCTGGAAAGCCTGCCA
GGNAAGTGGTGTGCCTACCAGAGGCATGAAAGTGCTTNCTNCGATGGGGACAAATCCCCC
G

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_001406 unedited
AGCTATGGACCCGCGGCCGCAATCTANGATCGAGTTTTTTTTTTTTTTTTTTTTGGGTT
TTGGTGTTCAAATTTCCCTTTTACAGTAAAACTACTGAGGTGACGGCATATCCCGCCACC
ATGGCAATATCAACTTCCTGTTCCCCAGAAGGAGCGATTAGAAAAATCAGGAAGGAGCTG
GGAACTACAGCACCAGAGAGGTGAACTTGACCTCTGGTGGACAAAGCAACCATCTTGGCT
GGTGATTGAGGTGGCCAACCTGGTGCCCAACAACAGCTTTGATCTAATAAAACTGAGCTG
GGAGGAAACTGAGGCAACACCCAATTGCACACTAGAGGGCAGGAAGAGGTATCAGCTGGT
CACTATGGAAACAGTGGCCTTTGCTAAGTACCACTGTCAGCTAGACCAGCCAGTAGGCCA
CCATTTTGGTCACTAAGAAGGGAACTGTGTTGAGTCTGAAAGGAGTCAGAAATGTAGGAT
GGAATGAACAAGACAGCCATCTGGGTTACTCGGGAGAGCACATGGGTTCTTGGGGTAGTC
CTGTTGATTAACAGAGATTATACTGGGATATGGAAAGGAAAGAACAAGACAAATTANGCC
TGCCACAGCACATGGCAGTCATCTTAGCTGTCCTAAAATCAGCACAGAGCACAAGGGAAG
GGAGATCTTGGGAAGTGCCACTGAAGACTGGGAAAAGTCCTTCTCGGTCCACCTCTAACC
TCTTACAGTCAGTAAGTTCCAGCTTCCTCCTGAAGGAAAGTCTTCCCGCCTTCTTCTCCC
AGAATATGAACATCCACCTTCACTTCTGATTCCCAGACAAGCCATTTGGATTCCAGCCAG
ACCACTTCTGTTTCAGAGTGCTACCTTCTGTCTGGATGAAGGACTTCCAGTTCTGCTGAC
TGTTCTGGCATTCCCAGCCATTTTGNTGGCCCTGTCACCTCTGTCTGAAGAGTCATTCCG

Restriction Sites: NotI-NotI

ACCN: NM_001406

Insert Size: 3370 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_001406.3, NP_001397.1
RefSeq Size:	3236 bp
RefSeq ORF:	1023 bp
Locus ID:	1949
UniProt ID:	Q15768
Cytogenetics:	17p13.1
Domains:	Ephrin
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Axon guidance
Gene Summary:	EFNB3, a member of the ephrin gene family, is important in brain development as well as in its maintenance. Moreover, since levels of EFNB3 expression were particularly high in several forebrain subregions compared to other brain subregions, it may play a pivotal role in forebrain function. 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]