

Product datasheet for **SC323437**

Eph receptor B1 (EPHB1) (NM_004441) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Eph receptor B1 (EPHB1) (NM_004441) Human Untagged Clone
Tag:	Tag Free
Symbol:	Eph receptor B1
Synonyms:	ELK; EPHT2; Hek6; NET
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323437 sequence for NM_004441 edited (data generated by NextGen Sequencing)

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ATGGCCCTGGATTATCTACTACTGCTCCTCCTGGCATCCGCAGTGGCTGCGATGGAAGAA
ACGTTAATGGACACCAGAACGGCTACTGCAGAGCTGGGCTGGACGGCCAATCCTGCGTCC
GGGTGGGAAGAAGTCAGTGGCTACGATGAAAACCTGAACACCATCCGCACCTACCAGGTG
TGCAATGTCTTCGAGCCCAACCAGAACAATTGGCTGCTCACACCTTCATCAACCGGCGG
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ATTGCCACCAAGAAGTCAGCCTTCTGGTCTGAGGCCCTACCTCAAAGTAGACACCATT
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GAAGTCAGGAGCTTTGGGCTTACTCGGAATGGTTTTTACCTCGCTTTTCAGGATTAT
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TGCACCTGTCCGACCGGTTATTACCGAGCGGACTTTGACCCTCCAGAAGTGGCATGCACT
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CAGCACGTCTGTCAACATCACCACAAACCAAGCCGCCCTCCACCGTTCCCATCATG
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GTATATGTGGTACAGGTGCGTGCCCGCACTGTTGCTGGCTACGGCAAGTTCAGTGGCAAG
 ATGTGCTTCCAGACTCTGACTGACGATGATTACAAGTCAGAGCTGAGGGAGCAGCTGCC
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 CCCCTGCTCGACCGCTCCATCCCAGACTTACGGCCTTTACCACCGTGGATGACTGGCTC
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 CAGCTGGTCACCCAGATGACATCAGAAGACCTCCTGAGAATAGGCATCACCTTGGCAGGC
 CATCAGAAGAAGATCCTGAACAGCATTCTATGAGGGTCCAGATAAGTCAGTCACCA
 ACGGCAATGGCATGA

Clone variation with respect to NM_004441.4
 435 c=>t;1952 a=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_004441 unedited
 ACCGCCCCTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA
 ACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGGCACAGGCCCCACCCACGC
 GCGCCCGCACCGCCACGCGCACACACTCTGCCACGCCACGCAGCGCTCCGGGAAGTCCGGTCCGG
 GCGAGAGCGCAAAGGATACCGAGAAGCCACCCGCGGAGAGCGCAGCGGCCCTGGGACCGCGCTCT
 CCCGGCGTGTGCTCGCTCGGCTTGGTCTCGGGCCTGCGGGGCCGTGCGCCCGGCGATGGCCCTGGATAATC
 TACTACTGCTCCTCCCTGGCATCCGCATTGGCCTGCGAAGGGAAGAAAACGTTAATGGGACCCCAAACCG
 GCTACTGGCAAAGCTGGGCTGGGACGGCCATTCCGGCTTCCGGTGGGAAAAGGTAGTGGCTCGAAGAA
 AAACCGAAACCCCTCCCGCCCTCCCGGGGTGCAATGTTTTCGAGCCCCCAGAACATTGGCTGGCTC
 CCACCCCTTACTAACCGGGGGGGGCCATCGAATCTACACAGAAATGCCCTTCTGGGAGAGAATGCAGCA
 CCCTCCTTTTGTCTCCCATATCCGGAGGGGACCCCTACACTTTATATACTTTAAACGTGACGTGTATGT
 GCCACAGAGACTCCCCCTGTGTGAGAGCCTCATCTAAAGACACACTGTGCGAGAGAGATTCTCATGGGT
 TTGGGAAGCGGGGAAGGGTACAAGCTGGGTTGGCGCTATCGAAGGTGTACACCTTTGAATGAGCGCGTGT
 GCTCTTTGCCGTTTCAATGCACATGGACATGATGTTTCGACTACAGAGCAGCATCATCGAAGTGGCAGCA
 CTCACCAGAGAGTGTGACAA

Kinase Domain Sequence:

>SC323437 kinase domain raw sequence. By performing [BLASTX](#) analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation
 CRAGGTYMTCGGAGCAGGGAGTTTGGAGAAGTGTACAAGGGGCGTTTGAACCTGCCAGGCAMSASGGAAA
 TCTACGTGGCCATCATGACCCTGAAGGCAGGGTACTCGGAGAAGCAGCGTCCGGACTTTCTGAGTGAGGC
 GAGCATCATGGGCCAGTTCGACCATCCTAACATCATTCCGCTGGAGGGTGTGGTCACCAAGAGTCCGGCT
 GTCATGATCATCACAGAGTTCATGGAGAATGGTGCATTGGATTCT

Restriction Sites:

Please inquire

ACCN:	NM_004441
Insert Size:	4000 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).
OTI Annotation:	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell, 2008 May p536-548.
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:	<ol style="list-style-type: none">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_004441.3 , NP_004432.1
RefSeq Size:	4691 bp
RefSeq ORF:	2955 bp
Locus ID:	2047
UniProt ID:	P54762
Cytogenetics:	3q22.2
Domains:	pkinese, EPH_Ibd, TyrKc, SAM, S_TKc, FN3
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Axon guidance

Gene Summary:

Ephrin receptors and their ligands, the ephrins, mediate numerous developmental processes, 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. The Eph family of receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Ephrin receptors make up the largest subgroup of the receptor tyrosine kinase (RTK) family. The protein encoded by this gene is a receptor for ephrin-B family members. [provided by RefSeq, Jul 2008]