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Product datasheet for SC323531

TIE2 (TEK) (NM_000459) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TIE2 (TEK) (NM_000459) Human Untagged Clone
Tag:	Tag Free
Symbol:	TIE2
Synonyms:	CD202B; GLC3E; TIE-2; TIE2; VMCM; VMCM1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC323531 sequence for NM_000459 edited (data generated by NextGen Sequencing)

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ATGGACTCTTTAGCCAGCTTAGTTCTCTGTGGAGTCAGCTTGCTCCTTTCTGGAACTGTG
GAAGGTGCCATGGACTTGATCTTGATCAATTCCCTACCTCTTGTATCTGATGCTGAAACA
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TCGGCCTTCACCAGGCTGATAGTCCGGAGATGTGAAGCCCAGAAGTGGGGACCTGAATGC
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ATTGTTACACTCAACTATTTGGAACCTCGGACAGAATATGAACTCTGTGTGCAACTGGTC
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ACCTACGTGAATACCACGCTTTATGAGAAGTTTACTTATGCAGGAATTGACTGTTCTGCT
GAAGAAGCGGCCTAG

Clone variation with respect to NM_000459.3
1962 a=>g;2322 g=>a;2564 a=>t;2565 a=>g

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_000459 unedited
CCGCCGTTGTCGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAA
CCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCAGCCTGCTTCTGT
GCTGTTCCTTCTTGCCTCTAACTTGTAAACAAGACGTAGTAGGACGATGCTAATGGAAAGTCACAAACCG
CTGGGTTTTTGAAAGGATCCTTGGGACCTCATGCACATTTGTGGAAACTGGATGGAGAGATTTGGGGAAG
CATGGACTCTTTAGCCAGCTTAGTTCTCTGTGGAGTCAGCTTTGCTCCTTTCTGGAACTGTGGGAAGGTG
CCATGGACTTGATCTTGATCAATTCCCTACCTCTTTGTATCTGATGCTGAAACATCTTCTCACCCTGCAT
TGCCCTGGGTGGGCGCCCCCTGAACCCCATCACCCTTAGGGAGGGGACTTGGAGGCCTTATTGAACCAGA
CCAGATTCCCGTTGGAAGTTACTAAGGATGTGACCAAAAATGGGCTAAAAATTTGTTGGAAGAGAAAAAA
GGCTGAAAAATCATGGGTGCTTATTTCTGAAGGGCGATTCAGGGAAGGGCATTCGGATCCACCCGGGATA
TGCTACAAAGTTCTTTCTACGTCTCTTATATTATACTGGACGGGATATACGGCACTTCTCTTCAAGGGTG
TGTAAGAAACGCGTATTCAAAGGGTTCTTATCATTGGCCGGTAGATCCGAATTCAGATCCCGTCTAGTCC
CACCGAAGTCGAGTAGATCGCGGATATAGGAACCTTTCTGCTCTAACGTATCCGATTGACCAATGGCCCA
GCCCATTCTGTGACACGGTTCGAAATGAAGAAATCCGGTGGAACCTGTA

Kinase Domain Sequence:	>SC323531 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation GWGTGATTGGGGAGCATTTTGGCCAGTTCTTAAGGCGCGCATCAAGAAGGATGGGTTACGGATGGATGCT GCCATCATGAGAATGAAAGAATATGCCTCCAAAGATGATCACAGGGACTTTGCAGGAGAACTGGAAGTTC TTTGTAAACTTGGACACCATCCAAACATCATCAATCTCTTAGGAGCATGTGAACATCGAGGCTACTTGTA CCTGGCCATTGAGTACGCGCCCCATGGAAACCTTCTGGACTTCCT
Restriction Sites:	Please inquire
ACCN:	NM_000459
Insert Size:	4880 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:	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_000459.1, NP_000450.1
RefSeq Size:	4787 bp
RefSeq ORF:	3375 bp
Locus ID:	7010
UniProt ID:	Q02763
Cytogenetics:	9p21.2
Domains:	pkinase, TyrKc, S_TKc, FN3, EGF, EGF
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

Gene Summary: This gene encodes a receptor that belongs to the protein tyrosine kinase Tie2 family. The encoded protein possesses a unique extracellular region that contains two immunoglobulin-like domains, three epidermal growth factor (EGF)-like domains and three fibronectin type III repeats. The ligand angiopoietin-1 binds to this receptor and mediates a signaling pathway that functions in embryonic vascular development. Mutations in this gene are associated with inherited venous malformations of the skin and mucous membranes. Alternative splicing results in multiple transcript variants. Additional alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Feb 2014]
Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).