

Product datasheet for **SC323581**

TIE1 (NM_005424) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TIE1 (NM_005424) Human Untagged Clone
Tag:	Tag Free
Symbol:	TIE1
Synonyms:	JTK14; LMPHM11; TIE
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323581 sequence for NM_005424 edited (data generated by NextGen Sequencing)

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ATGGTCTGGCGGGTGCCCTTTCTTGCTCCCCATCCTCTTCTTGCTTCTCATGTGGG
GCGGCGGTGGACCTGACGCTGCTGGCCAACCTGCGGCTCACGGACCCCCAGCGCTTCTT
CTGACTTGCGTGTCTGGGAGGCCGGGGCGGGAGGGGCTCGGACGCTGGGGCCCGCC
CTGCTGCTGGAGAAGGACGACCGTATCGTGCGCACCCCGCCGGGCCACCCCTGCGCCTG
GCGCGCAACGGTTCGCACCAGGTCACGCTTCGCGGCTTCTCAAGCCCTCGGACCTCGT
GGCGTCTTCTCCTGCGTGGGCGGTGCTGGGGCGCGGCGCACGCGCGTCATCTACGTGCAC
AACAGCCCTGGAGCCACCTGCTCCAGACAAGGTCACACACTGTGAACAAAGGTGAC
ACCGCTGACTTTCTGCACGTGTGCACAAGGAGAAGCAGACAGACGTGATCTGGAAGAGC
AACGGATCCTACTTCTACACCCTGGACTGGCATGAAGCCAGGATGGGCGGTTCTCTGCTG
CAGCTCCCAAATGTGCAGCCACCATCGAGCGGCATCTACAGTGCCACTTACCTGGAAGCC
AGCCCCCTGGGCAGCGCCTTCTTTCGGCTCATCGTGCGGGGTTGTGGGGCTGGGCGCTGG
GGGCCAGGCTGTACCAAGGAGTGCCAGGTTGCCTACATGGAGGTGTCTGCCACGACCAT
GACGGCGAATGTGTATGCCCCCTGGCTTCACTGGCACCCGCTGTGAACAGGCCTGCAGA
GAGGGCCGTTTTGGGCAGAGCTGCCAGGAGCAGTGCCAGGCATATCAGGCTGCCGGGC
CTACCTTCTGCCTCCCAGACCCTATGGCTGCTTTGTGGATCTGGCTGGAGAGGAAGC
CAGTGCCAAGAAGCTTGTGCCCTGGTCATTTTGGGGTGATTGCCGACTCCAGTGCCAG
TGTGAGAAATGGTGGCACTTGTGACCGGTTCAAGTGGTTGTGTCTGCCCTCTGGGTGGCAT
GGAGTGCACTGTGAGAAGTCAGACCGGATCCCCAGATCCTCAACATGGCCTCAGAACTG
GAGTTCAACTTAGAGACGATGCCCGGATCAACTGTGCAGCTGCAGGGAACCCCTTCCCC
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ATTGTGGAGCCAGAGAAGACCACAGCTGAGTTCGAGGTGCCCGCTTGGTTCTTGGCGGAC
AGTGGGTTCTGGGAGTGCCGTGTGTCCACATCTGGCGGCAAGACAGCCGGCGCTTCAAG
GTCAATGTGAAAGTGCCCCCGTGGCTGCACCTCGGCTCCTGACCAAGCAGAGC
CGCCAGCTTGTGGTCTCCCCGCTGGTCTCGTTCTCTGGGGATGGACCCATCTCCACTGTC
CGCTGCACTACGGCCCCAGGACAGTACCATGGACTGGTCGACCATTGTGGTGGACCC

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AGTGAGAACGTGACGTTAATGAACCTGAGGCCAAAGACAGGATACAGTGTTCGTGTGCAG
CTGAGCCGGCCAGGGGAAGGAGGAGAGGGGGCCTGGGGCCTCCCACCCTCATGACCACA
GACTGTCTGAGCCTTTGTTGCAGCCGTGGTTGGAGGGCTGGCATGTGGAAGGCACTGAC
CGGCTGCGAGTGAGCTGGTCCTTGCCCTTGGTGCCCGGGCCACTGGTGGGCGACGGTTTC
CTGCTGCGCCTGTGGGACGGGACACGGGGCAGGAGCGGGGGAGAACGTCTCATCCCC
CAGGCCCGCACTGCCCTCCTGACGGGACTCACGCCTGGCACCCACTACCAGCTGGATGTG
CAGCTTACCACCTGCACCCTCCTGGGCGCCGCTCGCCCCCTGCACACGTGCTTTGCCC
CCCAGTGGGCCTCCAGCCCCCGACACCTCCACGCCAGGCCCTCTCAGACTCCGAGATC
CAGCTGACATGGAAGCACCCGGAGGCTCTGCCTGGCCAAATATCCAAGTACGTTGTGGAG
GTGCAGGTGGCTGGGGTGCAGGAGACCCACTGTGGATAGACGTGGACAGGCCTGAGGAG
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AGCATTACAGGGCTCGGGGACTGGAGCAACACAGTAGAAGAGTCCACCCTGGCAACGGG
CTGCAGGTGAGGGCCAGTCCAAGAGAGCCGGGACGTGAAGAGGGCCTGGATCAGCAG
CTGATCCTGGCGTGGTGGGCTCCGTGTCTGCCACCTGCCTCACCATCCTGGCCGCCCTT
TTAACCTGGTGTGCATCCGAGAAGTGCCTGCATCGGAGACGCACCTTACCCTACCAG
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CGGCCAAAACCTGCAGCCCGAGCCCTGAGCTACCCAGTGTAGAGTGGGAGGACATCACC
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CATCGTGACTTTGCGGGAGAAGTGAAGTTCTGTGCAAATGGGGCATCACCCCAACATC
ATCAACCTCCTGGGGCCTGTAAGAACCAGGTTACTTGTATATCGCTATTGAATATGCC
CCCTACGGGAACCTGCTAGATTTTCTGCGGAAAAGCCGGTCTAGAGACTGACCCAGCT
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TCTCGGGAGAGGAGTTTATGTGAAGAAGACGATGGGGCGTCTCCCTGTGCGCTGGATG
GCCATTGAGTCCCTGAACACAGTGTCTATACCACCAAGAGTGTGTCTGGTCTTTGGA
GTCCTTCTTTGGGAGATAGTGAAGCCTGGAGGTACACCCTACTGTGGCATGACCTGTGCC
GAGCTCTATGAAAAGCTGCCCCAGGGCTACCGCATGGAGCAGCCTCGAAACTGTGACGAT
GAAGTGTACGAGCTGATGCGTCAAGTGTGGCGGGACCGTCCCTATGAGCGACCCCTTT
GCCAGATTGCGCTACAGCTAGGCCGATGCTGGAAGCCAGGAAGCCTATGTGAACATG
TCGCTGTTTGAGAACTTCACTTACGCGGGCATTGATGCCACAGCTGAGGAGGCCTGA
    
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Clone variation with respect to NM_005424.2
 2609 a=>t;2610 a=>g

5' Read Nucleotide Sequence:

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>OriGene 5' read for mutant NM_005424 unedited
ACGCCGTACAGCAAAGGGCGGTAGGCGGTACGGTGGGAGGACTATATAAGCAGAGCTCATATAGCGA
CACTATAGAATAACAAGCTACTCGTACTTTTTGCAGCGCCGCGAATACGGCACGAGGAGCATCTGACCCC
AGGCCAGCTCGTCTGGCTGGCCTGGTCTGGCCTCTGGAGTATGGTCTGGCGGGTGCCCTTTCTTGC
TCCCCATCCTCTTCTTGGCTTCTCATGTGGGCGCGCGGTGGACCTGACGCTGCTGGCCAACCTGCGGCT
CACGGACCCCCAGCGCTTCTTCTGACTTGCCTGTCTGGGGGAGGGCCGGGGGGGGAAGGGCCTCGG
ACGCTGGGCCCCGCCCCGGCTGCTGGAGAAGACCAACCGTATCGTTGCCCCCCCCCCCGGCCACC
CCCTGCCCTGGCCCCCAACGGGTTCCAACAGTTCCCCTCCGGGGCCTTCCCAACCCCTCGAACC
CTCTGGGCCTTTTTCTCCGGCTTGGCCGGGGCTGGGGCCCCGCCAACCCCTTATTTTACTGTCC
CAAAACCCCGGACCCCCCGTGTTTTCCAAAAGGGTCCCACCCCTGAAACAAGGTGTACCCCTT
TTTTCTTTTTGCCCCTTTGTGCCCGGGAAACCAAAAACCTTTTTTCTAGAAAAACACGTTTTCTTTTTTC
CCCCGAAATGGAGGGACCCCAAGGGGGTGTCTGTGTACCACCAATTTGTACCCCTTAGGGGGT
CTCAAGTGTCCCTTTCTAGTGATCACCCACCCGTGTGACAACACACTTACGCATATAGTGGTGGTGT
GGGAGTAGCGATCAAGAGACAAAATTAAGACAGTTCAATTTA
    
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Kinase Domain Sequence:	>SC323581 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 TKARGMTCATCGGGGAGGGGACTTCGGCCAGGTCRTCCGGGCCATGATCAAGAAGGACGGGCTGAAGATG AACGCAGCCATCATGATGCTGAAAGAGTATGCCTCTGAAAATGACCATCGTGACTTTGCGGGAGAAGCTGG AAGTTCTGTGCAAATTGGGGCATCACCCCAACATCATCAACCTCCTGGGGCCTGTAAGAACCGAGGTTA CTTGATATCGCTATTGAATATGCCCCCTACGGGAACCTGCTAGA
Restriction Sites:	Please inquire
ACCN:	NM_005424
Insert Size:	4200 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_005424.2 , NP_005415.1
RefSeq Size:	4000 bp
RefSeq ORF:	3417 bp
Locus ID:	7075
UniProt ID:	P35590
Cytogenetics:	1p34.2
Domains:	pkinase, TyrKc, S_TKc, ig, IG, FN3, EGF, EGF
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane

Gene Summary:

This gene encodes a member of the tyrosine protein kinase family. The encoded protein plays a critical role in angiogenesis and blood vessel stability by inhibiting angiopoietin 1 signaling through the endothelial receptor tyrosine kinase Tie2. Ectodomain cleavage of the encoded protein relieves inhibition of Tie2 and is mediated by multiple factors including vascular endothelial growth factor. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Nov 2011]
Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).