

Product datasheet for **SC119420**

Angiopoietin 2 (ANGPT2) (NM_001147) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Angiopoietin 2 (ANGPT2) (NM_001147) Human Untagged Clone
Tag:	Tag Free
Symbol:	ANGPT2
Synonyms:	AGPT2; ANG2; LMPHM10
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Cell Selection:	None



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Fully Sequenced ORF: >OriGene ORF within SC119420 sequence for NM_001147 edited (data generated by NextGen Sequencing)

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ATGTGGCAGATTGTTTTCTTACTCTGAGCTGTGATCTTGTCTTGGCCGAGCCTATAAC
AACTTTTCGGAAGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCC
TGCAGCTACACTTTCTCCTGCCAGAGATGGACAACTGCCGCTCTTCTCCAGCCCCTAC
GTGTCCAATGCTGTGCAGAGGGACGCCGCTCGAATACGATGACTCGGTGCAGAGGCTG
CAAGTGCTGGAGAACATCATGGAAAACAACACTCAGTGGCTAATGAAGCTTGAGAAATTAT
ATCCAGGACAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGTACAGAACCAG
ACGGCTGTGATGATAGAAATAGGGACAAACCTGTTGAACCAAACAGCTGAGCAAACGCGG
AAGTAACTGATGTGGAAGCCCAAGTATTAATCAGACCACGAGACTTGAAGTTCAGCTC
TTGGAACACTCCCTCTCGACAAACAAATGGAAAAACAGATTTTGGACCAGACCAGTGAA
ATAAACAAATTGCAAGATAAGAACAGTTTCTAGAAAAGAAGGTGCTAGCTATGGAAGAC
AAGCACATCATCCAACACTACAGTCAATAAAAGAAGAGAAAGATCAGCTACAGGTGTAGTA
TCCAAGCAAAATCCATCATTGAAGAACTAGAAAAAAAATAGTGACTGCCACGGTGAAT
AATTCAGTTCTTCAAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACT
ATGATGTCCACATCAAACCTCAGCTAAGGACCCCACTGTTGCTAAAGAAGAACAAATCAGC
TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTA
ACATTCCTAATTCTACAGAAGAGATCAAGGTCTACTGTGACATGGAAGCTGGAGGAGGC
GGGTGGACAATTATTCAGCGACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGGAAA
GAATATAAAGTGGGATTTGGTAACCCCTCAGGAGAATATTGGCTGGGAAATGAGTTTGT
TCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGAAGGG
AATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAAGTCAATTATAGG
ATTCACCTTAAAGGACTTACAGGGACAGCCGGCAAAATAAGCAGCATCAGCCAACAGGA
AATGATTTTAGCACAAAGGATGGAGACAACGACAATGTATTTGCAAATGTTACAAATG
CTAACAGGAGGCTGGTGGTTTGTGATGTGGTCTTCAAACCTTGAACGGAATGACTAT
CCACAGAGGCAGAACACAATAAGTTCAACGGCATTAAATGGTACTACTGGAAAGGCTCA
GGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATTTCTAA

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Clone variation with respect to NM_001147.2
408 g=>t;735 g=>a;882 g=>a;932 c=>t

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_001147 unedited

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AAAGTCAGAATTGTATACGACTCATATAGCGGGCCGCGCAATTCGCACGAGGCCTCGTGC
CGAATTNCGCACGAGGCATGGGGCTGGGTGGGGGGCAGGCATTCTGCTCTGATTTTCC
TGTGGCCTGGCTAGTGACCCCTACAGGGAAGATAACGGCTAAGCCAGGAGGGCGGAGCA
GCCCACTACACATGTCTGGCTGCTTTATCAACTTATCATATAANGAAAGGAAAGTGATT
GAGTCGGATACTGACACTGTAGGATCTGGGGAGAGAGGAACAAAGGACCGTGAAGCTGC
TCTGTAAGAGCTGACACAGCCCTCCCAAGTGAGCAGGAGTGGTCTTCCCACTGGAATCTG
ACAGTTTACTGCATGCCTGGAGAGAACACAGCAGTAAAAACCAGGTTTGCTACTGGAAAA
AGAGGAAAGAGAAGACTTTCATTGGCGGACCCAGCCATGGCAGCGTAGCAGCCCTGCGTT
TCAGACGGCAGCAGCTCGGGACTCTGGACGTGTGTTGCCCTCAAGTTTGCTAAGCTGCT
GGTTTATTACTGAAGAAAGAATGTGGCAGATTGGTTTCTTACTCTGAGCTGTGATCTTG
GCTTGGCCGAGCCTATAACAACCTTTCGGAAGAGCATGGACAGCATANGAAAGAAGCAAT
ATCAGGTGCAGCATGGGTCTGCAGCTACACTTCTCCTCTGCGAGAGATGGACAACCTGCC
GCTCTTCTCCAGCCCCTACGTGTCCAATGCTGTGCANAGGGACCCGCGCTCNAATACA
ATGACTCCGTGCANAGGCTGCAAGTGTGGAGAACATCATGGGAAACACACTCAGTGGCT
AATGAAGCTTGAGAATATATCCGGGACACATGAAGAAAGAATGGTGAATACAGCAGATG
CGGTCAA

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3' Read Nucleotide Sequence:	>OriGene 3' read for NM_001147 unedited GCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTATCCCCTAATAAGTTATATTTAA TTACTAAAAATACCTTCATATTTAAACAATCAGGCAGAAAAAATAGTACGGTCTGCATAT AAACTAAAATGGCAGCTTTCTGTTGATAATTTTCAGAGATTCTGGAAGTTTCTACCATATA AATTTGAAATACGTATTTGAGCATTAACTATAACTAAGCTGTCAACATAAATGTAATA CGCTGTTTTTGAATAAAAAATTTAAAGCACCTAAGAGATGGAGTAAAAATGCACTAACTG TTTTTCCAAATATTAACCTTCTAGTAACCCCTTCTCAGAATATCCCTGAATATGTCTTTT TATGGCTTAGAGAGTTTTTTTCTCCTTTTAATTGTGATAGTGATGGTGAATTCAGGACA TATGGGTATTTACACAGTGATAAAACAGTGCTCAGAAGAATGCAGTTCCAAGATGATCTG TATTGTATAACATAAGTGTCTGTTTTCCAGTTATTTACTGATAAACTTGCACATAACAT TCTTGGTTGTGACAGCAGCGTCTGTAACCTGTCAGTCTGATTCTCAGCCTCGGGTTCATC TTTGCATAGGTGTTCTGTCTAATCACAATTATGGATGTTTAGGGTCTTGCTTTGGTCCGT TAAGTGATGCAAGTTAAAGTGATAAAGTTACAGGCTCTAATCTGGAGCATGTGGTCCC GTCAGCACCGAGCACACGCCCTCTGTGGTGGAAGAGACACAGTCCGAGCCGTGACTTT CAGTGCCTGGGCTTAAGTCTTTGAAATAGTTGAGACAGTCTTCAGTGACCTGGATGT TTAGAATCTGCTGGTCCGACATCATGGNTGTGGCCTTGAGCGATAGCCTGACCCTTCAG TATACCATNTAATGCCGNTGACTTATTTGGGGTCTGGCCCTGGGGAAAGNACATTCGGCT CAAGNTGGAGGGACACATGCATCAACCACCACCTNCT
Restriction Sites:	NotI-NotI
ACCN:	NM_001147
Insert Size:	2770 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
RefSeq:	NM_001147.1 , NP_001138.1
RefSeq Size:	2269 bp
RefSeq ORF:	1491 bp
Locus ID:	285
UniProt ID:	Q15123
Domains:	FBG
Protein Families:	Druggable Genome, Secreted Protein

Gene Summary:

This gene belongs to the angiopoietin family of growth factors. The protein encoded by this gene is an antagonist of angiopoietin 1, and both angiopoietin 1 and angiopoietin 2 are ligands for the endothelial TEK receptor tyrosine kinase. Angiopoietin 2 is upregulated in multiple inflammatory diseases and is implicated in the direct control of inflammation-related signaling pathways. The encoded protein affects angiogenesis during embryogenesis and tumorigenesis, disrupts the vascular remodeling ability of angiopoietin 1, and may induce endothelial cell apoptosis. This gene serves a prognostic biomarker for acute respiratory distress syndrome. [provided by RefSeq, Aug 2020]

Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.