

Product datasheet for **RC219398**

Angiopoietin 1 (ANGPT1) (NM_001146) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Angiopoietin 1 (ANGPT1) (NM_001146) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Angiopoietin 1
Synonyms:	AGP1; AGPT; ANG1; HAE5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC219398 representing NM_001146
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACAGTTTTCTTTCTTTGCTTTCTCGTGCATTCTGACTCACATAGGGTGCAGCAATCAGCGCC
 GAAGTCCAGAAAACAGTGGGAGAAGATATAACCGATTCAACATGGGCAATGTGCCTACACTTTCTTCT
 TCCAGAACACGATGGCAACTGTCGTGAGAGTACGACAGACCAGTACAACCAAACGCTCTGCAGAGAGAT
 GCTCCACACGTGGAACCGGATTTCTTTCCAGAACTTCAACATCTGGAACATGTGATGGAAAATTATA
 CTCAGTGGCTGCAAAAACCTTGAATACATTGTGAAAACATGAAGTCGGAGATGGCCAGATACAGCA
 GAATGCAGTTCAGAACCACCGCTACCATGCTGGAGATAGGAACCAGCCTCCTCTCAGACTGCAGAG
 CAGACCAGAAAGCTGACAGATGTTGAGACCCAGGTAATAAATAAATAAATAAATAAATAAATAAATAA
 TGGAGAATTCATTATCCACCTACAAGCTAGAGAAGCAACTTCTTCAACAGACAAATGAAATCTTGAAGAT
 CCATGAAAAAACAGTTTATTAGAACATAAAATCTTAGAAATGGAAGGAAAAACAAGGAAGAGTTGGAC
 ACCTTAAAGGAAGAGAAAGAGAACTTCAAGGCTTGGTTACTCGTCAAACATATATAATCCAGGAGCTGG
 AAAAGCAATTAACAGAGCTACCAACAACAGTGTCTTCAAGCAGCAACTGGAGCTGATGGACAC
 AGTCCACAACCTTGTCAATCTTTGCACTAAAGAAGGTGTTTTACTAAAGGGAGGAAAAAGAGAGGAAGAG
 AAACCATTTAGAGACTGTGCAGATGTATATCAAGCTGGTTTTAATAAAAGTGGAACTACACTATTTATA
 TTAATAATATGCCAGAACCCAAAAGGTGTTTTGCAATATGGATGTCAATGGGGGAGGTTGGACTGTAAT
 ACAACATCGTGAAGATGGAAGTCTAGATTTCCAAAGAGGCTGGAAGGAATATAAAATGGGTTTTGGAAT
 CCCTCCGGTGAATATTGGCTGGGAATGAGTTTATTTTGGCATTACCAGTCAGAGGCAGTACATGCTAA
 GAATTGAGTTAATGGACTGGGAAGGGAACCGAGCCTATTCACAGTATGACAGATTCACATAGGAATGA
 AAAGCAAAACTATAGGTTGATTTAAAAGGTCACTGGGACAGCAGGAAAAACAGAGCAGCCTGATCTTA
 CACGGTGTGATTTGAGCACTAAAGATGCTGATGATAAAGCAACTGTATGTGCAAAATGTGCCCTCATGTTAA
 CAGGAGGATGGTGGTTTGTGCTTGTGGCCCTCCAATCTAAATGGAATGTTCTATACTGCGGGACAAAA
 CCATGGAAAACCTGAATGGGATAAAGTGGCACTACTTCAAAGGGCCAGTTACTCCTTACGTTCCACAAC
 ATGATGATTCGACCTTTAGATTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219398 representing NM_001146
 Red=Cloning site Green=Tags(s)

MTVFLSFAFLAAILTHIGCSNQRRSPENSGRRYNRIQHGCAYTFILPEHDGNCRESTTDQYNTNALQRD
 APHVEPDFSSQKLQHLEHVMENYQWLQKLENYIVENMKSEMAQIQQNAVQNHTATMLEIGTSLLSQTAE
 QTRKLTQVETQVLNQTSRLEIQLENSLSTYKLEKQLLQQTNEILKIHEKNSLLEHKILEMEGKHKEELD
 TLKEEKENLQGLVTRQTYIIQELEKQLNRATTNNSVLQKQLELMDTVHNLVNLCTKEGVLLKGGKREEE
 KPFRDCADVYQAGFNKSGIYTIYINNMPEPKVFCNMDVNGGWTVIQHREDGSLDFQRGWKEYKMGFGN
 PSGEYWLGNFIFAITSQRQYMLRIELMDWEGNRAYSQYDRFHIGNEKQNYRLLYKGTGTAGKQSSLIL
 HGADFSTKDADNDNCMCKCALMLTGGWFFDACGPSNLNGMFYTAGQNHGKLNLIKWHYFKGPSYSLRSTT
 MMIRPLDF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6049_d07.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_001146

ORF Size: 1494 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001146.5](#)

RefSeq Size: 4338 bp

RefSeq ORF: 1497 bp

Locus ID: 284

UniProt ID: [Q15389](#)

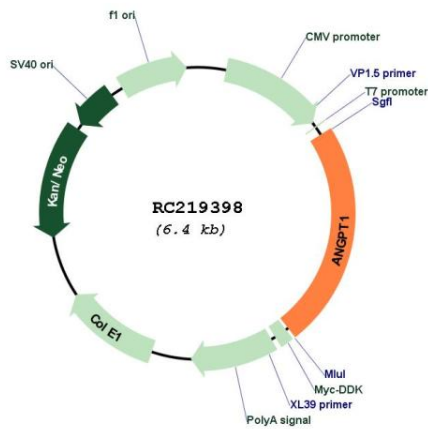
Cytogenetics: 8q23.1

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein

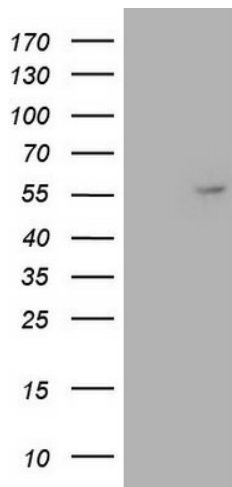
MW: 57.3 kDa

Gene Summary: This gene encodes a secreted glycoprotein that belongs to the angiotensin family. Members of this family play important roles in vascular development and angiogenesis. All angiotensins bind with similar affinity to an endothelial cell-specific tyrosine-protein kinase receptor. The protein encoded by this gene is a secreted glycoprotein that activates the receptor by inducing its tyrosine phosphorylation. It plays a critical role in mediating reciprocal interactions between the endothelium and surrounding matrix and mesenchyme and inhibits endothelial permeability. The protein also contributes to blood vessel maturation and stability, and may be involved in early development of the heart. Mutations in this gene are associated with hereditary angioedema. [provided by RefSeq, Aug 2020]

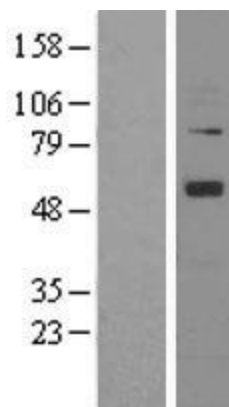
Product images:



Circular map for RC219398



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ANGPT1 (Cat# RC219398, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ANGPT1 (Cat# [TA807191])(1:500). Positive lysates [LY400458] (100ug) and [LC400458] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400458]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219398 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).