

Product datasheet for **RC225727**

Angiopoietin 2 (ANGPT2) (NM_001118888) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Angiopoietin 2 (ANGPT2) (NM_001118888) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Angiopoietin 2
Synonyms:	AGPT2; ANG2; LMPHM10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC225727 representing NM_001118888
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTGGCAGATTGTTTTCTTACTCTGAGCTGTGATCTTGTCTTGCCGAGCCTATAACAACCTTCGGA
 AGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACACTTTCCTCCT
 GCCAGAGATGGACAACCTGCCGCTTTCCTCCAGCCCTACGTGTCCAATGCTGTGCAGAGGGACGCGCCG
 CTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGTGGAGAACATCATGAAAAACAACACTCAGTGGC
 TAATGAAGGTATTAATCAGACCAGAGACTTGAACCTCAGCTCTTGAACACTCCCTCTCGACAAAACA
 ATTGAAAAACAGATTTGGACCAGACCAGTGAATAAACAATTGCAAGATAAGAACAGTTTCTAGAA
 AAGAAGGTGCTAGCTATGGAAGACAAGCACATCATCAACTACAGTCAATAAAGAAGAGAAAGATCAGC
 TACAGGTGTAGTATCCAAGCAAATTCATCATTGAAGAAGTAAAAAAGTACTGACTGCCACGGT
 GAATAATTCAGTCTTCAGAAGCAGCAACATGATCTCATGGAGACAGTTAATAACTTACTGACTATGATG
 TCCACATCAAACCTCAGCTAAGGACCCACTGTTGCTAAAGAAGAACAAATCAGCTTCAGAGACTGTGCTG
 AAGTATCAAATCAGGACACACCACGAATGGCATCTACACGTTAACATTCCCTAATTCTACAGAAGAGAT
 CAAGGCCACTGTGACATGGAAGCTGGAGGAGCGGGTGGACAATTATTCAGCGACGTGAGGATGGCAGC
 GTTGATTTTCAGAGGACTTGAAAGAATATAAAGTGGGATTTGGTAACCCCTCAGGAGAATATTGGCTGG
 GAAATGAGTTTGTTCGCAACTGACTAATCAGCAACGCTATGTGCTTAAAATACACCTTAAAGACTGGGA
 AGGGAATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAACTCAATTATAGGATTCAC
 CTTAAAGGACTTACAGGGACAGCCGGCAAATAAGCAGCATCAGCCAACCAGGAAATGATTTAGCACAA
 AGGATGGAGACAACGACAAATGTATTTGCAAATGTTACAAATGCTAACAGGAGGCTGGTGGTTGATGC
 ATGTGGTCTTCCAACCTGAACGGAATGTACTATCCACAGAGGCAGAACACAAATAAGTTCAACGGCATT
 AAATGGTACTACTGGAAGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATGATCCGACCAGCAGATT
 TC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC225727 representing NM_001118888
 Red=Cloning site Green=Tags(s)

MWQIVFFTLSCDLVLAAYNNFRKSMDSIGKKQYVQVQHGSCSYTFLLPEMDNCRSSSSPYVSNVQRDAP
 LEYDSSVQRLQVLENIENNTQWLMKVLNQTRLELQLLEHSLSTNKLEKQILDQTSEINKLQDKNSFLE
 KKVLAAMEDKHIIQLQSIKEEKDQLQVLVSKQNSIEELEKKIVTATVNNSVLQKQQHDLMETVNNLLTMM
 STSNSAKDPTVAKEEQISFRDCAEVFKSGHTTNGIYTLTFPNSTEEIKAYCDMEAGGGWTIIQRREDGS
 VDFQRTWKEYKVGFGNPSGEYWLGNFVSQLTNQRYVLKIHLDWEGNEAYSLYEHFYLSEELNYRIH
 LKGLTGTAGKISSISQPGNDFSTKDGNDKICKCSQMLTGGWVFDACGPSNLNGMYYPQRQNTNKFNGI
 KWYYWKSGSYSLKATMMIRPADF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja1307_g09.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001118888

ORF Size: 1332 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_001118888.2](#)

RefSeq ORF: 1335 bp

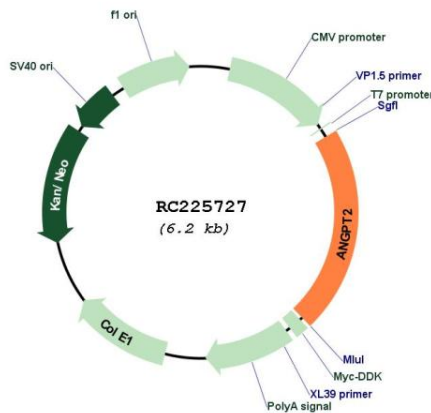
Locus ID: 285

UniProt ID: [O15123](#)

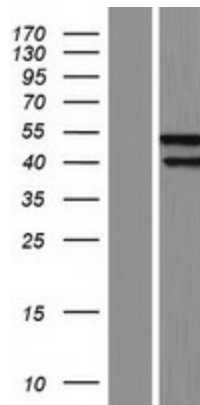
Cytogenetics: 8p23.1
Protein Families: Druggable Genome, Secreted Protein
MW: 50.96 kDa

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]

Product images:



Circular map for RC225727



Western blot validation of overexpression lysate (Cat# [LY426530]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225727 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).