

## Product datasheet for **RG217216**

### Angiopoietin 2 (ANGPT2) (NM\_001147) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Angiopoietin 2 (ANGPT2) (NM_001147) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Angiopoietin 2
Synonyms:	AGPT2; ANG2; LMPHM10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG217216 representing NM\_001147  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTGGCAGATTGTTTTCTTACTCTGAGCTGTGATCTTGTCTTGCCCGCAGCCTATAACAACCTTCGGA  
 AGAGCATGGACAGCATAGGAAAGAAGCAATATCAGGTCCAGCATGGGTCCTGCAGCTACACTTTCCTCCT  
 GCCAGAGATGGACAACCTGCCGCTCTTCCCTCAGCCCTACGTGTCCAATGCTGTGCAGAGGGACGCGCCG  
 CTCGAATACGATGACTCGGTGCAGAGGCTGCAAGTGTGGAGAACATCATGAAAAACAACACTCAGTGGC  
 TAATGAAGCTTGAGAATTATCCAGGACAACATGAAGAAAGAAATGGTAGAGATACAGCAGAATGCAGT  
 ACAGAACCAGACGGCTGTGATGATAGAAATAGGGACAACCTGTTGAACCAACAGCTGAGCAAACGCGG  
 AAGTTAACTGATGTGGAAGCCCAAGTATTAATCAGACCAGAGACTTGAACCTCAGCTCTTGGAACT  
 CCCTCTCGACAAACAAATGGAAAAACAGATTTGGACCAGACCAGTAAAATAACAAATGCAAGATAA  
 GAAGAGAAAGATCAGCTACAGGTGTAGTATCCAAGCAAAATCCATCATTGAAGAACTAGAAAAA  
 TAGTGACTGCCACGGTGAATAATTCAGTCTTCAAAGCAGCAACATGATCTCATGGAGACAGTTAATAA  
 CTTACTGACTATGATGTCCACATCAAACCTCAGCTAAGGACCCACTGTTGCTAAAGAAGAACAATCAGC  
 TTCAGAGACTGTGCTGAAGTATTCAAATCAGGACACACCACAAATGGCATCTACACGTTAACATTCCTA  
 ATTCTACAGAAGAGATCAAGGCCTACTGTGACATGGAAGCTGGAGGAGCGGGTGGACAATTATTCAGCG  
 ACGTGAGGATGGCAGCGTTGATTTTCAGAGGACTTGAAAGAATATAAAGTGGGATTTGGTAACCCCTCA  
 GGAGAATATTGGCTGGGAAATGAGTTTGTTCGCAACTGACTAATCAGCAACGCTATGTGCTTAAATAC  
 ACCTTAAAGACTGGGAAGGGAATGAGGCTTACTCATTGTATGAACATTTCTATCTCTCAAGTGAAGAA  
 CAATTATAGGATTCACCTTAAAGGACTTACAGGACAGCCGCAAAATAAGCAGCATCAGCCAACCCAGGA  
 AATGATTTTAGCACAAGGATGGAGACAACGACAATGTATTTGCAAATGTTACAAATGCTAACAGGAG  
 GCTGGTGGTTGATGCATGTGGTCTTCCAACCTTGAACGGAATGTACTATCCACAGAGGCAGAACACAAA  
 TAAGTTCAACGGCATTAAATGGTACTACTGAAAGGCTCAGGCTATTCGCTCAAGGCCACAACCATGATG  
 ATCCGACCAGCAGATTTTC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

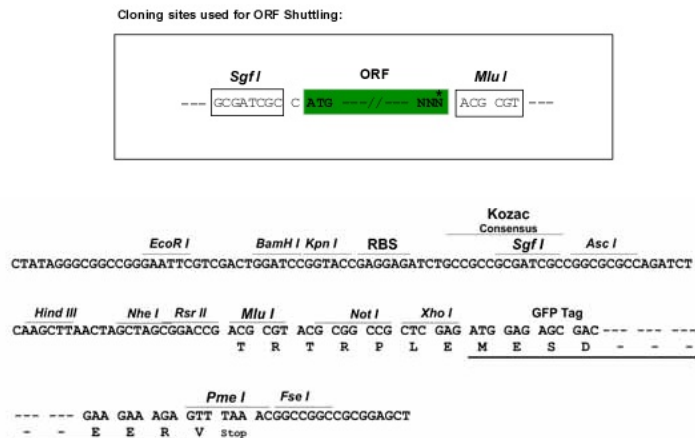
>RG217216 representing NM\_001147  
 Red=Cloning site Green=Tags(s)

MWQIVFFTLSCDLVLAAYNNFRKSMDSIGKKQYVQVHGSCSYTFLLPEMDCRSSSSPYVSNVQRDAP  
 LEYDSSVQRLQVLENIENNTQWLMKLENYIQDNMCKEMVEIQQNAVQNTAVMIEIGTNLLNQTAEQTR  
 KLT DVEAQV LNQTTRLELQ LLEHSLSTNKLEKQILDQTSEINKLQDKNSFLEKKVLAMEDKHIIQLQSIK  
 EEKDLQVLVSKQNSIIIEELEKKIVTATVNNVSLQKQHDLMETVNNLLTMMSTNSAKDPTVAKEEQIS  
 FRDCAEVFKSGHTTNGIYTLTFPNSTEEIKAYCDMEAGGGWTIIQRREDGVSDFQRTWKEYKVGFGNPS  
 GEYWLGNFVSQLTNQRYVVKIHLKDWEGNEAYSLYEHFYL SSEELNYRIHLKGLTGTAGKISSISQPG  
 NDFSTKDGDNKCIKCSQMLTGGWFFDAGPSNLNGMYYPQRQNTNKFNGIKWYWKSGYSLKATMM  
 IRPADF

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001147

**ORF Size:** 1488 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.

**RefSeq:** [NM\\_001147.1](#), [NP\\_001138.1](#)

**RefSeq Size:** 2269 bp

**RefSeq ORF:** 1491 bp

**Locus ID:** 285

**UniProt ID:** [O15123](#)

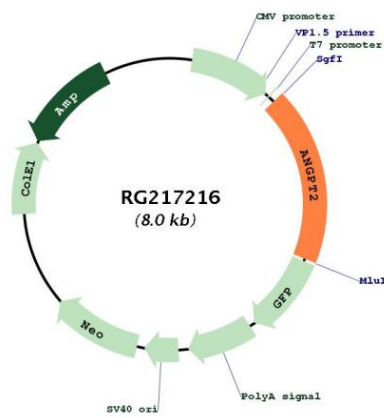
**Cytogenetics:** 8p23.1

**Domains:** FBG

**Protein Families:** Druggable Genome, Secreted Protein

**Gene Summary:** This gene belongs to the angiotensin family of growth factors. The protein encoded by this gene is an antagonist of angiotensin 1, and both angiotensin 1 and angiotensin 2 are ligands for the endothelial TEK receptor tyrosine kinase. Angiotensin 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 angiotensin 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 RG217216