

Product datasheet for RC210394

WNT1 (NM_005430) Human Tagged ORF Clone

WNT1

Product data:

Product Type: Expression Plasmids

Product Name: WNT1 (NM_005430) Human Tagged ORF Clone

Tag: Myc-DDK

Synonyms: BMND16; INT1; OI15

Mammalian Cell Neomycin

Selection:

Symbol:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RC210394 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGGGCTCTGGCCGCTGCTGGCTGGCTTGCTACGCTGCTGCTGCCGCTGCCGCTCTGCCCG CAGCCCTGGCTGCCAACAGCAGTGGCCGATGGTGGGGTATTGTGAACGTAGCCTCCTCCACGAACCTGCT TACAGACTCCAAGAGTCTGCAACTGGTACTCGAGCCCAGTCTGCAGCTGTTGAGCCGCAAACAGCGGCGT CTGATACGCCAAAATCCGGGGATCCTGCACAGCGTGAGTGGGGGGGCTGCAGAGTGCCGTGCGCGAGTGCA AGTGGCAGTTCCGGAATCGCCGCTGGAACTGTCCCACTGCTCCAGGGCCCCACCTCTTCGGCAAGATCGT CAACCGAGGCTGTCGAGAAACGGCGTTTATCTTCGCTATCACCTCCGCCGGGGTCACCCATTCGGTGGCG CGCTCCTGCTCAGAAGGTTCCATCGAATCCTGCACGTGTGACTACCGGCGGCGCGCCCCGGGGGCCCCG ACTGGCACTGGGGGGGCTGCAGCGACAACATTGACTTCGGCCGCCTCTTCGGCCGGGAGTTCGTGGACTC TTCTCCGAGATGCGCCAGGAGTGCAAGTGCCACGGGATGTCCGGCTCATGCACGGTGCGCACGTGCTGGA TGCGGCTGCCCACGCTGCGCCGTGGGCGATGTGCTGCGCGACCGCTTCGACGGCGCCTCGCGCGTCCT GTACGGCAACCGCGCAGCAACCGCGCTTCGCGGGCGGAGCTGCTGCGCCTGGAGCCGGAAGACCCGGCC CACAAACCGCCCTCCCCCACGACCTCGTCTACTTCGAGAAATCGCCCAACTTCTGCACGTACAGCGGAC GCCTGGGCACAGCAGGCACGGCAGGGCGCCTGTAACAGCTCGTCGCCCGCGCTGGACGGCTGCAAGCT GCTCTGCTGCGGCAGGGGCCACCGCACGCACGCAGCGCGTCACCGAGCGCTGCAACTGCACCTTCCAC TGGTGCTGCCACGTCAGCTGCCGCAACTGCACGCACACGCGCGTACTGCACGAGTGTCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210394 protein sequence

Red=Cloning site Green=Tags(s)

MGLWALLPGWVSATLLLALAALPAALAANSSGRWWGIVNVASSTNLLTDSKSLQLVLEPSLQLLSRKQRR LIRQNPGILHSVSGGLQSAVRECKWQFRNRRWNCPTAPGPHLFGKIVNRGCRETAFIFAITSAGVTHSVA RSCSEGSIESCTCDYRRRGPGGPDWHWGGCSDNIDFGRLFGREFVDSGEKGRDLRFLMNLHNNEAGRTTV FSEMRQECKCHGMSGSCTVRTCWMRLPTLRAVGDVLRDRFDGASRVLYGNRGSNRASRAELLRLEPEDPA HKPPSPHDLVYFEKSPNFCTYSGRLGTAGTAGRACNSSSPALDGCELLCCGRGHRTRTQRVTERCNCTFH WCCHVSCRNCTHTRVLHECL

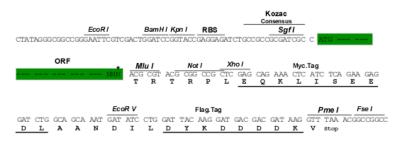
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6006 d10.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_005430

ORF Size: 1110 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).



Cytogenetics:

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: <u>NM 005430.4</u>

 RefSeq Size:
 2284 bp

 RefSeq ORF:
 1113 bp

 Locus ID:
 7471

 UniProt ID:
 P04628

Protein Families: Adult stem cells, Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Secreted

Protein, Stem cell relevant signaling - Wnt Signaling pathway, Transmembrane

Protein Pathways: Basal cell carcinoma, Hedgehog signaling pathway, Melanogenesis, Pathways in cancer, Wnt

signaling pathway

12q13.12

MW: 41 kDa

Gene Summary: The WNT gene family consists of structurally related genes which encode secreted signaling

proteins. These proteins have been implicated in oncogenesis and in several developmental processes, including regulation of cell fate and patterning during embryogenesis. This gene is a member of the WNT gene family. It is very conserved in evolution, and the protein encoded by this gene is known to be 98% identical to the mouse Wnt1 protein at the amino acid level.

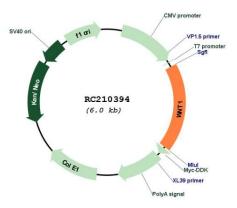
The studies in mouse indicate that the Wnt1 protein functions in the induction of the

mesencephalon and cerebellum. This gene was originally considered as a candidate gene for Joubert syndrome, an autosomal recessive disorder with cerebellar hypoplasia as a leading feature. However, further studies suggested that the gene mutations might not have a significant role in Joubert syndrome. This gene is clustered with another family member,

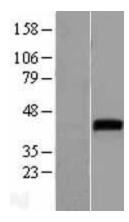
WNT10B, in the chromosome 12q13 region. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC210394



Western blot validation of overexpression lysate (Cat# [LY401668]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210394 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).