

## **Product datasheet for MR205285**

## Wnt7a (NM\_009527) Mouse Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Wnt7a (NM\_009527) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Wnt7a

Synonyms: Al849442; px; tw; Wnt-7a

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>MR205285 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGACCCGGAAAGCCGCGCCTCCCTGGGCCACCTCTTTCTCAGCCTGGCCATAGTCTACCTCCGGATCG
GTGGCTTCTCTTCGGTGGTAGCTCTGGGTGCGAGCATCATCTGTAACAAGATCCCAGGCCTGGCTCCCAG
ACAGCGGCCAATCTGCCAGAGCCGGCCGGACGCCATCATCGTCATAGGAGAAGGCTCCCAAATGGGCCTG
GACGAGTGTCAGTTTCAGTTCCGAAATGGCCGTTGGAACTGCTCAGCGCTGGGAGAGCGTACTGTCTTCG
GGAAGGAGCTCAAAGTGGGGAGTCGGGAGGCTGCCTTCACCTATCGGATTATCGCTGCGGGCGTGGCCCA
TGCCATCACTGCTGCCTGCACCCAGGGCAACCTGAGCGACTGTGGCTGCGACAAGGAAGCAAGGCCAG
TACCACCGGGACGAGGGCTGGAAGTGGGGTGGCTGCTCTGCCGACAACCTGACCTACGGCTTCGCCA
AGGTCTTCGTGGATGCCCGGGAGATCAAGCAGAATGCCCGGACCATCCGCTACAGCATCACAATAACGAGGC
GGGTCGGAAGATCCTGGAGGAACATGAAGCTGGAGTGTAAGTGCCATGGTGTTCAGGCTCCTGTACC
ACTAAGACGTGCTGGACCACACTGCCACAGTTCCGAAACAAGAGCCCCCACCTTTCTGAAGATCAAGAACC
AGGCCGTCCACGTGGAGCCTGTGCGTGCCAGTCGAAACAAGCGGCCCACCTTTCTGAAGATCAAGAAGCC
CCTGTCCTACCGCAAGCCCATGGACACTGACCTGGTGTATATCGAGAAGTCACCCAATTACTGTGAAGAG
GACCCAGTGACAGGCCGTGGGTACCCAGGGCCGAGCCTGCAATAAGACGCCCCTCAGGCCAGTGGCT
GTGACCTCATGTGCTGTGGCCGTGGCTACAACACACCACCAGTACGCCCGGGTGTGGCAACTGCAA
ATTCCACTGGTGCTGCTACGTCAAGTGTAACACGTGCAGGCCACGGAGATGTATACCGTGCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR205285 protein sequence

Red=Cloning site Green=Tags(s)

MTRKARRCLGHLFLSLGIVYLRIGGFSSVVALGASIICNKIPGLAPRQRAICQSRPDAIIVIGEGSQMGL DECQFQFRNGRWNCSALGERTVFGKELKVGSREAAFTYAIIAAGVAHAITAACTQGNLSDCGCDKEKQGQ YHRDEGWKWGGCSADIRYGIGFAKVFVDAREIKQNARTLMNLHNNEAGRKILEENMKLECKCHGVSGSCT TKTCWTTLPQFRELGYVLKDKYNEAVHVEPVRASRNKRPTFLKIKKPLSYRKPMDTDLVYIEKSPNYCEE DPVTGSVGTQGRACNKTAPQASGCDLMCCGRGYNTHQYARVWQCNCKFHWCCYVKCNTCSERTEMYTCK

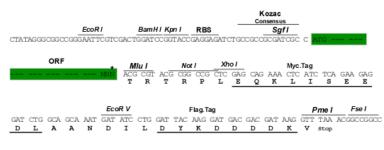
#### **TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 

Cloning sites used for ORF Shuttling:





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_009527

ORF Size: 1050 bp

OTI Disclaimer: Du

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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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:** <u>NM 009527.4</u>

 RefSeq Size:
 3176 bp

 RefSeq ORF:
 1050 bp

 Locus ID:
 22421

 UniProt ID:
 P24383

 Cytogenetics:
 6 40.45 cM

 MW:
 39 kDa

**Gene Summary:** Ligand for members of the frizzled family of seven transmembrane receptors that functions

in the canonical Wnt/beta-catenin signaling pathway (PubMed:18230341, PubMed:20530549, PubMed:23629626). Plays an important role in embryonic development, including dorsal versus ventral patterning during limb development, skeleton development and urogenital tract development (PubMed:7885472, PubMed:9769174, PubMed:9790192). Required for

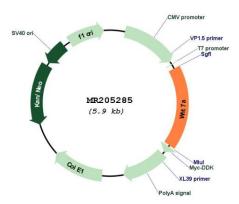
central nervous system (CNS) angiogenesis and blood-brain barrier regulation

(PubMed:28803732). Required for normal, sexually dimorphic development of the Mullerian ducts, and for normal fertility in both sexes (PubMed:9790192). Required for normal neural stem cell proliferation in the hippocampus dentate gyrus (PubMed:23629626). Required for normal progress through the cell cycle in neural progenitor cells, for self-renewal of neural stem cells, and for normal neuronal differentiation and maturation (PubMed:23629626). Promotes formation of synapses via its interaction with FZD5 (PubMed:20530549).

[UniProtKB/Swiss-Prot Function]



# **Product images:**



Circular map for MR205285