

Product datasheet for **MC227274**

Wnt5a (NM_001256224) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Wnt5a (NM_001256224) Mouse Untagged Clone
Tag: Tag Free
Symbol: Wnt5a
Synonyms: 8030457G12Rik; Wnt-5a
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC227274 representing NM_001256224
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTTCCAAGTTCTTCTAATGGCTTTGGCCACGTTTTTCTCCTTCGCCAGGTTGTTATAGAAGCTA
 ATCTTTGGTGGTCTCTAGGTATGAATAACCCTGTTGAGATGTCAGAAGTATATATCATAGGTGCACAGCC
 TCTCTGCAGCCAACTGGCAGGACTTTCTCAAGGACAGAAGAACTCTGCCACTTGTATCAGGACCACATG
 CAGTACATTGGAGAAGGTGCGAAGACAGGCATCAAGGAATGCCAGTACCAGTCCGGCATCGGAGATGGA
 ACTGCAGCACAGTGGACAATACTTCTGTCTTTGGCAGGGTGTGCAAATAGGCAGCCGAGAGACGGCCTT
 CACGTACGCGGTGAGCGCAGCTGGGGTGGTGAACGCCATGAGCCGAGCATGCCGGGAGGGCGAGCTGTCT
 ACCTGTGGCTGCAGCCGCTGCGCGCCCAAGGACCTGCCTCGGGACTGGTTGTGGGGCGGCTGCGGAG
 ACAACATCGACTATGGCTACCGCTTCGCCAAGGAGTTCGTGGACGCTAGAGAAAGGGAACGAATCCACGC
 TAAGGGTTCCTATGAGAGCGCACGCATCCTCATGAACCTACACAACAATGAAGCAGGCCGTAGGACAGTA
 TACAACCTGGCAGATGTAGCCTGTAAGTGTATGGAGTGTCTGGCTCCTGTAGCCTCAAGACGTGCTGGC
 TGCAGCTGGCGGACTCCGGAAGGTGGGGATGCCCTCAAGGAGAAGTATGATAGCGCGGGCCATGAG
 GCTCAACAGCCGGGCAAGCTGGTGCAGGTCAACAGCCGCTTCAACTCCCGACCACGCAGGACCTGGTC
 TACATCGACCCAGTCCGGACTACTGTGTGCGCAACGAGAGCACTGGCTCGCTGGGCACGCAGGGACGCC
 TGTGCAACAAGACCTCAGAGGGGATGGACGGCTGCGAGCTCATGTGCTGTGGGCGTGGCTATGACCAGTT
 TAAGACAGTGCAGACCGAAGCTGTATTGCAAGTTTCACTGGTGTGCTATGTCAAATGCAAGAAGTGC
 ACGGAGATTGGATCAGTTCGTGTGCAAATAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001256224



Insert Size:	1083 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none">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_001256224.1, NP_001243153.1</u>
RefSeq Size:	3731 bp
RefSeq ORF:	1083 bp
Locus ID:	22418
UniProt ID:	<u>P22725</u>
Cytogenetics:	14 16.8 cM

Gene Summary:

Ligand for members of the frizzled family of seven transmembrane receptors (PubMed:17117926). Can activate or inhibit canonical Wnt signaling, depending on receptor context (PubMed:16602827). In the presence of FZD4, activates beta-catenin signaling. In the presence of ROR2, inhibits the canonical Wnt pathway by promoting beta-catenin degradation through a GSK3-independent pathway which involves down-regulation of beta-catenin-induced reporter gene expression (PubMed:16602827). Suppression of the canonical pathway allows chondrogenesis to occur and inhibits tumor formation. Stimulates cell migration (PubMed:17117926). Decreases proliferation, migration, invasiveness and clonogenicity of carcinoma cells and may act as a tumor suppressor. Mediates motility of melanoma cells (By similarity). Required during embryogenesis for extension of the primary anterior-posterior axis and for outgrowth of limbs and the genital tubercle (PubMed:10021340). Inhibits type II collagen expression in chondrocytes (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) has multiple differences, compared to variant 1. These differences result in a distinct 5' UTR and cause translation initiation at a downstream start codon, compared to variant 1. The encoded protein (isoform 2) has a shorter N-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.