

Product datasheet for MC213185

Tsku (NM_001024619) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Tsku (NM_001024619) Mouse Untagged Clone
Tag: Tag Free
Symbol: Tsku
Synonyms: 9530051K01Rik; E2ig4; Lrrc54; Tsk
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC213185 representing NM_001024619
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGTGCTCTCTGTTCTGCTGCTGCTGCGCCGTGGCAGAGTGCAGACGACTCGGCCGTGTTCCCTG
GCTGCCAGTGTGAAGAAGAGACATTCGGCTCTTTGACAGTTTCAGCCTGATCCGTGTGGACTGCAGCAG
CCTGGGCCCCACATTGTGCTGTGCCATCCCTTTGGATACAGCCACCTGGACCTGTCTCCAACCGG
CTAGAAAACCGTGAATGAGTCAGTCTTGGCAGGGCCAGGCTATACCACACTGGCTGGCCTGGATCTCAGTT
ACAACCTGCTCACCAGCATCATGCCCTCTGCCTTCTCCCGACTGCGCTACCTGGAGTCACTTGACCTCAG
CCACAATGGCCTGGCAGCCCTGCCGGCAGAGATTTTACCAGCTCCCCCTTGAGTGACATCAATCTGAGC
CATAACCGACTACGAGAGGTCTCGATATCTGCCTTACCACCCACAGCCAGGGCCGGCACTGCACGTGG
ACCTATCCCAATCTTATCCATCGCCTGCTTCCCCATCCAGCCCGGGCCAGCCTGCCTGCACCTACCAT
TCAGAGCCTGAACCTGTCTGGAACCGATTCCGAGCTGTGCCGATCTCCGAGACCTACCCTGCCTTAC
CTGAGCCTGGATGGAAACCTCTGGCTACCATCAACCCAGATGCCTTTCATGGGGCTGGCAGGCCTCACCC
ACCTGTCACTGGCCAGCCTGCAGGGCATCCTCCATCTACCACCCAGGCTTCCGGGAGCTCCAGGCCT
TCAGGTCTGGACTTGTGAGCAACCCCAAGCTCAAGTGGGCAGGAGCTGAGGTGTTTTTCAGGCCTGGGT
TTGCTGCAGGAACTAGACCTGTGAGGCTCCAGCTTGGTGGCCCTGCCTGAGATGTGCTGCATCACCTCC
CTGCTTTACAAAGTGTGACGCTAGGCCAGGATGTGACAGTCCCGCCGCTGGTGGGGAGGGCCCTACCA
CCGGCAGCCTGGCTCCAGCCCTAAGGTAGTCTACTGTGGAGACCCAGGAATCTGCTGCCAGGGGC
CCAGACATTTTGTGA

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001024619



[View online »](#)

Insert Size:	1065 bp
OTI Disclaimer:	<p>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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	NM_001024619.3 , NP_001019790.1
RefSeq Size:	2510 bp
RefSeq ORF:	1065 bp
Locus ID:	244152
UniProt ID:	Q8CBR6
Cytogenetics:	7 E1

Gene Summary:

Contributes to various developmental events and other processes such as wound healing and cholesterol homeostasis through its interactions with multiple signaling pathways (PubMed:21856951, PubMed:22995554, PubMed:25159578, PubMed:31391339). Wnt signaling inhibitor which competes with WNT2B for binding to Wnt receptor FZD4 and represses WNT2B-dependent development of the peripheral eye (PubMed:21856951). Plays a role in regulating the hair cycle by controlling TGFB1 signaling (PubMed:22995554). Required for the development of the anterior commissure in the brain by inhibiting neurite outgrowth (PubMed:21055390, PubMed:23206892). Essential for terminal differentiation of hippocampal neural stem cells (PubMed:31983064). Plays a role in regulating bone elongation and bone mass by modulating growth plate chondrocyte function and overall body size (PubMed:30271858). Required for development of the inner ear through its involvement in stereocilia formation in inner hair cells (PubMed:32127020). Facilitates wound healing by inhibiting secretion of TGFB1 from macrophages which prevents myofibroblast differentiation, maintaining inflammatory cell quiescence (PubMed:25159578). Plays a role in cholesterol homeostasis by reducing circulating high-density lipoprotein cholesterol, lowering cholesterol efflux capacity and decreasing cholesterol-to-bile acid conversion in the liver (PubMed:31391339). In one study, shown to negatively regulate sympathetic innervation in brown fat, leading to reduced energy expenditure (PubMed:31535079). In another study, shown not to affect brown fat thermogenic capacity, body weight gain or glucose homeostasis (PubMed:31767170).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) differs in the 5' UTR compared to variant 1. All four variants encode the same protein. 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.