

Product datasheet for MR217070L3

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OriGene Technologies, Inc.

Tsku (NM_001168540) Mouse Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Tsku (NM_001168540) Mouse Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Tsku

Synonyms: 9530051K01Rik; E2ig4; Lrrc54; Tsk

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(MR217070).

Sgfl-Mlul

Sequence:

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:

Sgf 1 ORF Mlu I

----GCG ATC GCC ATG ---//--- NNN ACG CGT ---



st The last codon before the Stop codon of the ORF.

ACCN: NM_001168540

ORF Size: 1065 bp





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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: <u>NM 001168540.1</u>, <u>NP 001162012.1</u>

 RefSeq Size:
 2620 bp

 RefSeq ORF:
 1065 bp

 Locus ID:
 244152

 UniProt ID:
 <u>O8CBR6</u>

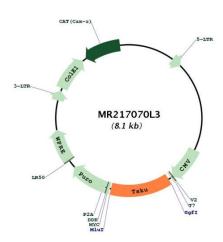
Cytogenetics: 7 E1



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]

Product images:



Circular map for MR217070L3