

## **Product datasheet for SC330638**

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# Tsukushin (TSKU) (NM\_001258210) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Tsukushin (TSKU) (NM\_001258210) Human Untagged Clone

Tag: Tag Free
Symbol: Tsukushin

**Synonyms:** E2IG4; LRRC54; TSK

**Vector:** pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC330638 representing NM\_001258210.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGCCGTGGCCCCTGCTGCTGCTGCCGTGAGTGGGGCCCAGACAACCCGGCCATGCTTCCCCGGG TGCCAATGCGAGGTGGAGACCTTCGGCCTTTTCGACAGCTTCAGCCTGACTCGGGTGGATTGTAGCGGC CTGGGCCCCACATCATGCCGGTGCCCATCCCTCTGGACACAGCCCACTTGGACCTGTCCTCCAACCGG CACAACCTGCTCACCAGCATCTCACCCACTGCCTTCTCCCGCCTTCGCTACCTGGAGTCGCTTGACCTC AGCCACAATGGCCTGACAGCCCTGCCAGCCGAGAGCTTCACCAGCTCACCCCTGAGCGACGTGAACCTT AGCCACAACCAGCTCCGGGAGGTCTCAGTGTCTGCCTTCACGACGCACAGTCAGGGCCGGGCACTACAC ACCATTCAGAGCCTGAACCTGGCCTGGAACCGGCTCCATGCCGTGCCCAACCTCCGAGACTTGCCCCTG CGCTACCTGAGCCTGGATGGGAACCCTCTAGCTGTCATTGGTCCGGGTGCCTTCGCGGGGCTGGGAGGC CTTACACACCTGTCTCTGGCCAGCCTGCAGAGGCTCCCTGAGCTGGCGCCCAGTGGCTTCCGTGAGCTA CCGGGCCTGCAGGTCCTGGACCTGTCGGGCAACCCCAAGCTTAACTGGGCAGGAGCTGAGGTGTTTTCA CTCCACCTCCGGCACTGCAGAGCGTCAGCGTGGGCCAGGATGTGCGGTGCCGGCGCCTGGTGCGGGAG GGCACCTACCCCGGAGGCCTGGCTCCAGCCCCAAGGTGGCCCTGCACTGCGTAGACACCCGGGATTCT GCTGCCAGGGGCCCCACCATCTTGTGA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001258210

**Insert Size:** 1062 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).





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**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 001258210.1</u>

RefSeq Size: 2682 bp
RefSeq ORF: 1062 bp
Locus ID: 25987
UniProt ID: Q8WUA8
Cytogenetics: 11q13.5

**Protein Families:** Secreted Protein

MW: 37.8 kDa

Gene Summary: Contributes to various developmental events and other processes such as wound healing and

cholesterol homeostasis through its interactions with multiple signaling pathways. Wnt signaling inhibitor which competes with WNT2B for binding to Wnt receptor FZD4 and represses WNT2B-dependent development of the peripheral eye. Plays a role in regulating the hair cycle by controlling TGFB1 signaling. Required for the development of the anterior commissure in the brain by inhibiting neurite outgrowth. Essential for terminal differentiation of hippocampal neural stem cells. Plays a role in regulating bone elongation and bone mass by modulating growth plate chondrocyte function and overall body size. Required for development of the inner ear through its involvement in stereocilia formation in inner hair cells. Facilitates wound healing by inhibiting secretion of TGFB1 from macrophages which prevents myofibroblast differentiation, maintaining inflammatory cell quiescence. 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. In one study, shown to negatively regulate sympathetic innervation in brown fat, leading to reduced energy expenditure. In another study, shown not to affect brown fat thermogenic capacity, body weight gain or glucose homeostasis.[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (2) differs in the 5' UTR and coding sequence compared to variant 3. The resulting isoform (b) is shorter at the N-terminus compared to isoform a.

Variants 1, 2, 4, and 5 all encode isoform b.