

Product datasheet for SC114661

Tsukushin (TSKU) (NM_015516) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tsukushin (TSKU) (NM_015516) Human Untagged Clone
Tag:	Tag Free
Symbol:	Tsukushin
Synonyms:	E2IG4; LRRC54; TSK
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC114661 sequence for NM_015516 edited (data generated by NextGen Sequencing) <pre> ATGCCGTGGCCCTGCTGCTGCTGCTGGCCGTGAGTGGGGCCAGACAACCCGGCCATGC TTCCCCGGGTGCCAATGCGAGGTGGAGACCTTCGGCCTTTTCGACAGCTTCAGCCTGACT CGGGTGGATTGTAGCGGCTGGGCCCCACATCATGCCGTGCCATCCCTCTGGACACA GCCCACTTGACCTGTCTCCAACCGGCTGGAGATGGTGAATGAGTCGGTGTTGGCGGGG CCGGGCTACACGACGTTGGCTGGCCTGGATCTCAGCCACAACCTGCTCACCAGCATCTCA CCCACTGCCTTCTCCCGCCTTCGCTACCTGGAGTCGCTTGACCTCAGCCACAATGGCCTG ACAGCCCTGCCAGCCGAGAGCTTCACCAGCTCACCCCTGAGCGACGTGAACCTTAGCCAC AACCAGCTCCGGGAGGTCTCAGTGTCTGCCTTCACGACGCACAGTCAGGGCCGGGCACTA CACGTGGACCTCTCCACAACCTCATTACCGCCTCGTGCCCCACCCACGAGGGCCGGC CTGCCTGCGCCCAACATTAGAGCCTGAACCTGGCCTGGAACCGGCTCCATGCCGTGCC AACCTCCGAGACTTGCCCTGCGCTACCTGAGCCTGGATGGGAACCTCTAGCTGTCATT GGTCCGGGTGCCTTCGCGGGGCTGGGAGGCCTTACACACCTGTCTCTGGCCAGCCTGCAG AGGCTCCCTGAGCTGGCGCCAGTGGCTTCCGTGAGCTACCGGGCTGCAGGTCTCTGGAC CTGTGGGCAACCCCAAGCTTAAGTGGGAGGAGCTGAGGTGTTTTCAGGCCTGAGCTCC CTGCAGGAGCTGGACCTTTCGGGACCAACCTGGTGCCCTGCCTGAGGCGCTGCTCCTC CACCTCCCGGCACTGCAGAGCGTCAGCGTGGGCCAGGATGTGCGGTGCCGGCGCCTGGTG CGGGAGGGCACCTACCCCGGAGGCCTGGCTCCAGCCCCAAGGTGGCCCTGCACTGCGTA GACACCCGGGAATCTGCTGCCAGGGGCCACCATCTTGTA </pre>

Clone variation with respect to NM_015516.3
 1032 t=>a


[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_015516 unedited
 TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGGAGGGCCCGCGG
 CCGGGCCCGGGGTGAGCGTGCCGAGGCGGCTGTGGCGCAGGCTTCCAGCCCCACCAT
 GCCGTGGCCCCCTGCTGCTGCTGCTGGCCGTGAGTGGGGCCAGACAACCCGGCCATGCTT
 CCCCAGGTGCCAATGCGAGGTGGAGACCTTCGGCCTTTTCGACAGCTTCAGCCTGACTCG
 GGTGATTGTAGCGGCCTGGGCCCCACATCATGCCGTGCCATCCCTCTGGACACAGC
 CCACCTTGACCTGTCCTCAACCGGCTGGAGATGGTGAATGAGTCGGTGTGGCGGGGCC
 GGCTACACGACGTTGGCTGGCTGGATCTCAGCCACAACCTGCTCACCAGCATCTCACC
 CACTGCCTTCTCCGCCTTCGCTACCTGGAGTCGCTTGACCTCAGCCACAATGGCCTGAC
 AGCCCTGCCAGCCGAGAGCTTCACCAGCTCACCCTGAGCGACGTGAACCTTAGCCACAA
 CCAGCTCCGGGAGGTCTCAGTGTCTGCCTTCACGACGACAGTCAGGGCCGGGCACTACA
 CGTGGACCTCTCCACAACCTCATTACCGCCTCGTGCCCAACCCACGAGGGCCGGCCT
 GCCTGCGCCACCATTCAGAGCCTGAACCTGGCCTGGAACCGGCTCCATGCCGTGCCAA
 CCTCCGAGACTTGCCCTGCGCTACCTGAGCCTGGATGGGAACCTCTAGCTGTCATTGG
 TNCCGGGTGCCTTCGCGNNGCTGGGAGGCCTTACACACCTGTCTCTGGCCAGCCTCGAG
 AGGCTCCCTGAGCTGCGCCAGTGCTTCCGTGAGCTACCGNNCTGCAGTCCTGGCA
 CCTGTCGNCACCCAGCTAACTGGCAGAAATTCTGAGGTGNT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_015516 unedited
 ATGGACCGGCGCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
 TTTTTTTTTTTTTTTTTTTTTTTTACTTTTTATAGGGTTATTAATCAAGGACCCGTAA
 ATAAATGATGGGCTAAGCAGGTGGGGGAAAACAACTCACTGCCCTGGGGGTCTTTGT
 GGGGCCCCCCTGATGCCCATGTGGCCCTGATGCCCAACTTCCCCAACACCCCAACA
 CAGGCCAGGACAATTTACAAAAGTGAACAAATGCCACCTTTTTTTGCTTTTACAAATG
 AAATGTTTCCATCCCGGCCAACAGGGGTAGGGGAGGCCGTTGAAAATGACCTCCCTT
 AAAAAGGCAACAACCTTTATAAAATGAAACTAAGGAAACCCCCAGGGTTCGGAACCTG
 AAATGCTACCTGGGGTAAAGCATAAATGAGTGGGTCGGGCAACCTTGTTCCTTTTACG
 GGATTCCTGGGAGGTAAAAAGGCTTTCCTGCTCAGGGCCCGTGGGGACTGAATCCAGG
 AGGCCCCCTGGAGATCCAGCCCGATGAGGCTCCCAACTGCAGCAACTCCTTGGGGCAA
 CATCTAAAGGATGCTCAGGGGAAATGGGTAGGTTTCCAGTCTGGATGCTGGGGGACCC
 CACCCAGGTGAAAACTGGCTAGGCTGGAACCAATGTGCCCTAACTTTAGAGGCTCC
 GAAAGGCAGAGTGACTTAACCATGCCCCACAACCTGGTCAAAGGCCCAAGTCCACTTGT
 GAAGCTCTTGCCGTGCTGGTGTGCTTCTCCTGGCTAAAGGGGAACAAGGCAGGGCCC
 CAAGAGGGAGCCCAAGCCGGGGAGGTGGGGCTATTAAAAGAGACANAAAATGCATTGGT
 CCCCCTTGGAGGCAGAAGCTTTGTCTCATTATGCCACTGGCCCGAGGAACATATATTA
 ACCTATTTCTTTAAGGCCATTTCCCTTTCCATGAGAAGTGGGCTT

Restriction Sites:

ECorI-NOT

ACCN:

NM_015516

Insert Size:

2750 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).

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: [NM_015516.3](#), [NP_056331.2](#)

RefSeq Size: 2725 bp

RefSeq ORF: 1062 bp

Locus ID: 25987

UniProt ID: [Q8WUA8](#)

Cytogenetics: 11q13.5

Domains: LRR

Protein Families: Secreted Protein

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 (1) 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.