

Product datasheet for **SC327112**

TKTL1 (NM_001145933) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TKTL1 (NM_001145933) Human Untagged Clone
Tag:	Tag Free
Symbol:	TKTL1
Synonyms:	TKR; TKT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

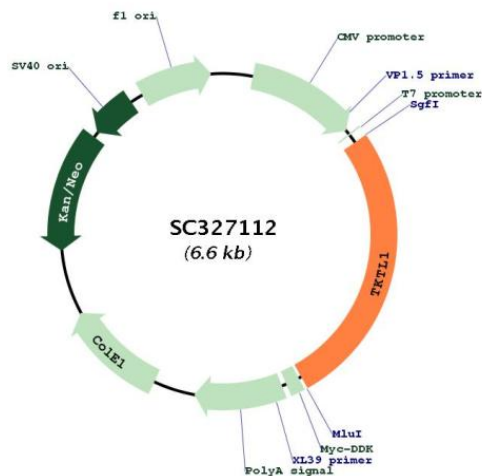


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Fully Sequenced ORF: >SC327112 representing NM_001145933.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
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TTGCAAGATATGGCCAGCCGCTTGGCAATCCATTCCATCAGGGCCACATGCTCCACGAGCTCCGGCAGT
TCTTCTGAGATCATGTCTGTGCTGTTCTTCTACATCATGAGGTACAAGCAGTCAGATCCAGAGAATCCG
GACAACGACCGATTTGTCTCGCAAAGAGACTGTCGTTTGTGGATGTGGCAACAGGATGGCTCGGACAA
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AGTGCCAGACATATCATAGTGGCCGTGAAATGCATGTTGCTGAAC TAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI

Plasmid Map:


ACCN: NM_001145933

Insert Size: 1773 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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001145933.1](#)

RefSeq Size: 2634 bp

RefSeq ORF: 1773 bp

Locus ID: 8277

Cytogenetics: Xq28

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Pentose phosphate pathway

MW: 64.7 kDa

Gene Summary: The protein encoded by this gene is a transketolase that acts as a homodimer and catalyzes the conversion of sedoheptulose 7-phosphate and D-glyceraldehyde 3-phosphate to D-ribose 5-phosphate and D-xylulose 5-phosphate. This reaction links the pentose phosphate pathway with the glycolytic pathway. Variations in this gene may be the cause of Wernicke-Korsakoff syndrome. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011]
Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 5' coding region compared to variant 1. This results in a shorter protein (isoform b) compared to isoform a.