

Product datasheet for **RC226941**

TSEN2 (NM_001145395) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	TSEN2
Synonyms:	PCH2B; SEN2; SEN2L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC226941 representing NM_001145395
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGCAGAAGCAGTTTTCCATGCCCAAAGAGGAAAAGAAGAGTGTATGAGACTTACGAGTCTCCATTGC
CAATCCCTTTTGGTCAGGACCATGGTCCTCTGAAAGAATCAAGATATCCGTGCTGAAATGATTAAACA
CAATGTGATTGTGAGGAATGCGGAGGACATTGAGCAGCTCTATGGGAAAGGTTATTTGGAAAAGGTATT
CTTTCAAGAAGCCGTCCAAGCTTCACAATTTAGATCCTAACTGGTTGCTAAATGGAAAGATATGAAGA
CAAACATGCCTATCATCACATCAAAGAGGTATCAGCATAGTGTGAGTGGGCAGCAGAGCTGATGCGTAG
ACAGGGGCAGGATGAGAGTACAGTGCAGCAATCCTCAAGGATTACACGAAACCGCTTGAGCATCCTCCT
GTGAAAAGGAATGAAGAGGCTCAAGTGCATGACAAGCTTAAGTCTGGAATGGTTTCAACATGGAAGGCA
CAGCAGGGGAGAGAGACCTTCTGTGTTAAACGGGACTCTGGAAGTCAGGTGGTGTGGGTGATCCCCG
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CGAGAGGATGCCTCACCTCTGCCCCATGTCTGTTGCTGCAACAAGATGCTCTCATCCTCCAGCGTGGCC
TTCATCATGAAGACGGCAGCCAGCACATCGGCCTCCTGCATCCTGGGACAGAGGGCCTGACCATGAGTA
CGTGCTGGTCGAGGAAGCGGAGTGTGCCATGAGCGAGAGGGAGGCTGCCCAATGAGGAAGCCTTTTTC
TTGGTCTATGCTCTGGGATGTTTAAGTATTTACTATGAGAAGGAGCCTTTAACGATAGTGAAGCTCTGGA
AAGCTTTACTGTAGTTCAGCCACGTTTCAAGACCTACATGGCCTACCATTACTTTGAAAGCAAGGG
CTGGGTGCCAAAGTGGGACTCAAGTACGGGACAGATTTACTGCTATATCGGAAAGGCCCTCCATTTTAC
CATGCAAGTTATTCTGTCATTATCGAGCTAGTTGATGACCATTTTGAAGGCTCTCTCCGAGGCCTCTCA
GTTGGAAGTCCCTGGCTGCCTTGAGCAGAGTTCCGTTAATGTCTCTAAGGTAAACAACATCAGCTTTG
CCATTGGAGTGCTACT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC226941 representing NM_001145395
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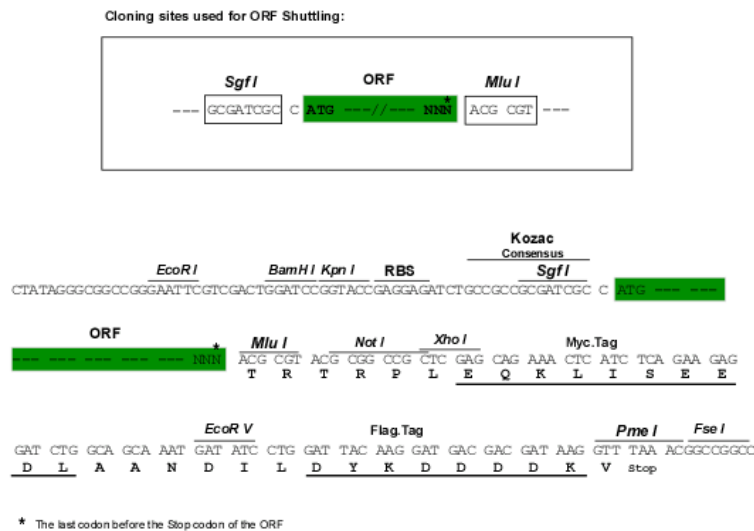
MAEAVFHAPKRKRVRVYETYESPLPIFGQDHGPLEKFIFRAEMINNVIVRNAEDIEQLYGKGYFGKGI
LSRSRPSFTISDPKLVAKWDMKTNMPIITSKRYQHSVEWAAELMRRQGQDESTVRRILKDYTKPLEHPP
VKRNEEAQVHDKLNSGMVSNMEGTAGGERPSVNVGDSGKSGGVGDPREPLGCLQEGSGCHPTTESFEKSV
REDASPLPHVCCCKQDALILQRLHHEDGSQHIGLLHPGDRGPDHEYVLVEEAECAMSEREAAPNEEAFF
LVYALGCLSIYYEKEPLTIVKLWKAFTVQPTFRTTYMAYHYFRSKGWVPKVLKYGTDLLLYRKGPFFY
HASYSVIIELVDDHFEGLRRLPSWKSALAALSRVSVNVSKVTQHQLCHWSVT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8057_e07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001145395

ORF Size: 1206 bp

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001145395.1](#), [NP_001138867.1](#)

RefSeq ORF: 1209 bp

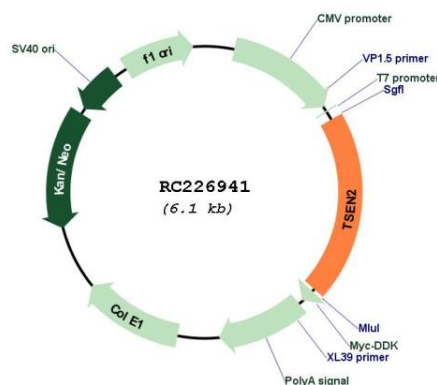
Locus ID: 80746

Cytogenetics: 3p25.2

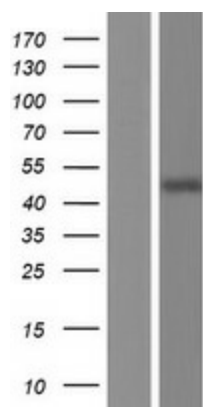
MW: 45.4 kDa

Gene Summary: This gene encodes one of the subunits of the tRNA splicing endonuclease. This endonuclease catalyzes the first step in RNA splicing which is the removal of introns. Mutations in this gene have been associated with pontocerebellar hypoplasia type 2. A pseudogene has been identified on chromosome 4. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Feb 2009]

Product images:



Circular map for RC226941



Western blot validation of overexpression lysate (Cat# [LY428859]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226941 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).