

Product datasheet for **MG227588**

Tsen54 (NM_029557) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tsen54 (NM_029557) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tsen54
Synonyms:	0610034P02Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG227588 representing NM_029557
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCCCGAACCCGAACCCGGGTCGGTGGAGGTTCCCGGGGGCGTGTGCTCAGCGCCTCGGAGCTCC
 GCGCCGCGCGCTCGCGGTCCAGAAAGCTACCACAGCGGTCGCATGGCCCCAAGGACTTCCTCCCGGACGG
 CTCGGAGGCCAGGCGGAGCGGCTGCGCCTGTGTGCGCAAGAGCTGTGGCAGCTGCTGGCGGAGGAGCGC
 GTGGAGCGCCTGGGCAGCTTGGTGGCCGCGAGTGGAAACCAGAAGAGGGCTTTGTGGAGTTGACGTCTC
 CTGCGGGGAAATTCTGGCAGACCATGGGCTACTCAGAGGAAGGACGGCAGCGACTTCACCCCGAAGAGGC
 TTTGTATCTGCTGGAGTGTGTTTCGATTAGCTCTTCTACCAAGACCTCCACTGTCTATCCAAGAGGCA
 TACCAGCTGCTGCTGACAGAGGACACCTTGAGTTTCTGCAGTACCAGGTCTTCAGCCACCTGAAGAGAC
 TGGGCTATGTGGTTCGTCGGTTCAGCTAAGCTCTGTCGTGTACCTTACGAGCGGCAGCTTAATTTGGA
 TGTTATGCCAGTGCCTGGAGGATGGGTCTGGCAAGAGGAAGAGGAGTCCAGCTGTCGGTCTGTTAAT
 AAGAAGCCCAAGTCTCGAGAACTCCCTGCCGCCGTCAGCCTGGCAGCCTCCAGCTCACCTGCCTGTG
 ACCAGAGTAGCCAATACCCAGAGGAGAAGTCTCAGGACTCAAGCCCCAGGCAGGGCTCAGAGCTCCCTT
 GCAGTTCTGGGGTCTCAGAGCCTTGCTGTATCTGGCCAGGGAAGACGTGGGGTGTGACCGAGAGAGT
 CACAAAATAGAGAATGGAGCTAAGGGAACCCCTAAGCTACGCTGGAACCTTTGAGCAGATCTCATTCCCA
 ACATGGCCTCTGATAGTCGCCACACTTTCTGCCTGCTCCAGCCCCAGAGCTGCTCCAGCCAATGTCAT
 TGGCGGAGGGACAGATGCTGAGTCTGGTGCCAAAAGCTGAACCAGCGGAGGGAGAAGCTCTCCCGTAGA
 GACCCGGGAACAGCAAGCAGTGGTCCAGCAGTTCGGGAGGATGTTAACGCAGATCCCGAGGTGCGGGCT
 GCTCCAGCTGGCAGGAGTACAAGGAGCTGCTGCAGAGGCGACAGACGAGAAGAGCCAGCCCGGCTCC
 ACACCTATGGGGCCAGTCCGTTACCCCTTGTCTGACCCTGATAAAGCCGATTGTCCAGCCGCGGTCCTG
 CAACATATCTCTGTACTGCAGACGACACACCTTGTGATGGAGGTTACCGGCTGCTGGAGAAGTCTGGAG
 GCTTGCAGATCAGCTTCGATGTTTACCAGGCTGACGCTGTGGCGACGTTCCGAAAAAACAGCCCTGGCAA
 ACCCTATGTGCGAATGTGCATTAGTGGGTTTGTGACCTGTCCAGACCTCTGCAGCCTCAAGTCTTG
 ACCTACCAGAGTGGGGATGTTCCCTGATCTTTGCTCTAGTGGACCACGGTGACATCTCCTTCTACAGCT
 TCAGAGACTTCACACTGCCAGGATCTGGGCCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227588 representing NM_029557
 Red=Cloning site Green=Tags(s)

MEPEPEPGSVEVPAGRVLASSELRAARSRSQKLPQRSHGPKDFLPDGSEAQAERLRLCRQELWQLLAER
 VERLGSVAAEWKPEEGFVELTSPAGKFWQTMGYSEEGRQLHPEEALYLLECGSIQLFYQDLPLSIQEA
 YQLLLTEDTSLFLQYQVFSHLKRLGYVVRRLQLSSVSPYERQLNLDGYAQCLEDEGSGKRKRSSSCRSVN
 KKPVLVQNSLPPVSLAASSSPACDQSSQYPEEKSDSSPRQGSELPLQFLGSSEPCSDLAREDVGDRES
 HKIENGAKGTPKLRWNFEQISFPNMAASDRHTFLPAPAPPELLPANVIGRGTDAESWCQKLNQRREKLSRR
 DREQQAVVQQFREDVNADPEVRGCSSWQEYKELLQRRQTQKSQPRPHLWGQSVTPLLDPKADCPAAVL
 QHISVLQTTHLADGGYRLLKSGGLQISFDVYQADAVATFRKNSPGKPYVRMCISGFDDPVPDLCSLKCL
 TYQSGDVPLIFALVDHGDISFYFRDFTLPRDLGH

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_029557

ORF Size: 1575 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.

RefSeq: [NM_029557.1](#), [NP_083833.1](#)

RefSeq Size: 1972 bp

RefSeq ORF: 1578 bp

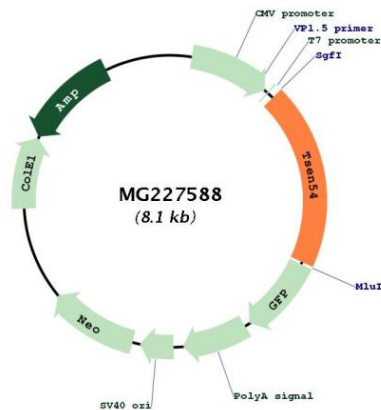
Locus ID: 76265

UniProt ID: [Q8C2A2](#)

Cytogenetics: 11 E2

Gene Summary:

Non-catalytic subunit of the tRNA-splicing endonuclease complex, a complex responsible for identification and cleavage of the splice sites in pre-tRNA. It cleaves pre-tRNA at the 5' and 3' splice sites to release the intron. The products are an intron and two tRNA half-molecules bearing 2',3' cyclic phosphate and 5'-OH termini. There are no conserved sequences at the splice sites, but the intron is invariably located at the same site in the gene, placing the splice sites an invariant distance from the constant structural features of the tRNA body. The tRNA splicing endonuclease is also involved in mRNA processing via its association with pre-mRNA 3'-end processing factors, establishing a link between pre-tRNA splicing and pre-mRNA 3'-end formation, suggesting that the endonuclease subunits function in multiple RNA-processing events (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for MG227588