

Product datasheet for **MG215425**

Tpo (NM_009417) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tpo (NM_009417) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tpo
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG215425 representing NM_009417
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGAACACTTGGAGCTATGGCAATAATGCTGGTGGTTATGGAACTGTAATTTTCTCTCTTTTATCC
 TGAGAAGCAGAGACATCTTGTGGGAAGACCATGAAAGTCCCATGTTATCAGTGCCTGGAAACGAGCCA
 GCTCATGGTGGACCATGCAGTCTACAACACCATGAAAAGAAACCTCAAGAAAAGGGAAGTCTTTCTCCA
 GCCCAGCTTCTCTTTTCTTAAAGTGCAGTCCACCAGTGGGGCTATTTCCCGAGCAGCAGAGATTA
 TGGAAACATCAATAACAAGTCATGAAACGTGAACAGTCAAGTTCACCGGATGCCTTATCAGCAGACAT
 TCTGGGCACAATTGCCAACCTGTCAGGATGCTTGCCTTTCATGCTGCCACCAAGATGCTCTGACACCTGC
 CTGGCAAATAAGTACCGGCCATCACAGGGCGTGAACAATAGAGATCACCCAGATGGGGAGCCTCCA
 ACACAGCCCTAGCAAGATGGCTGCCTCCTGTCTATGAAGATGGCTTCAGTCAGCCAAAGGCTGAAACCC
 TAATTTCTTATACCACGGCTTCCACTGCCCCCGTACGGGAAGTGACAAGGCACCTCATTCAAGTTTCC
 AATGAGGCTGTGACCGAAGATGACCAGTACTCTGATTTTCTGCCGGTGTGGGGACAGTACATCGATCATG
 ACATTGCTCTCACACCACAGAGCACTAGCACAGAGCCTTCTGGGGAGGTGTCGACTGCCAGCTGACCTG
 TGAGAACCAAAATCCTTGCTTCCCATAACAGCTTCCCTCAAACCTCCTCAGGGACCACTGCATGCCTGCCT
 TTCTACCGCTCCTCCGCCGCTTGTGGCACTGGGGACCAAGGTGCTCTCTTTGGCAACCTGTCTGCAGCCA
 ATCCGAGGCAGCAGATGAATGGCTTGACCTCCTTCTTGTGCTTCCACTGTGTACGGCAGCTCCCTGG
 CGTTGAGAAGCAGCTGCGCAACTGGAGCAGCTCGGCAGGACTGCTGCGTGTCAACACTCTCCACCTAGAT
 GCTGGCCGTGCCTACCTGCCCTTCGCAACAGCCGCTGCGCTCCAGAGCCTGGTACCCACGCACCAACC
 GCACGCCCTGCTTCTGGCTGGAGACGGTCGCGCCAGTGAGGTCCTGCCCTGGCAGGCTACACACCTT
 GTGGCTGCGCGAGCACAACCGCCTGGCTTCGGCCTTCAAGGCCATTAACAAGCACTGGAGCGCAACACT
 GCCTACCAGGAGCGCGCAAGGTGGTAGGGCACTGCACCAGATCATCACCATGAGGGATTATATCCCCA
 AAATCCTGGGTCCTGATGCCTTCAAGCAGTATGTGGGCCCTATGAAGGCTACAACCCCACTGTGAACCC
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 CGGCTAAACACTGACTTCCAGGAGCACACAGAGCTCCCCAGGTTGCAGCTGCGTGTGTCTTCTTCCAGAC
 CCTGGAGGCTTATCCAGGAAGGTGGTTGGATCCGATAGTGAGAGGCTCCTGGCAGAGCAGCCAAAGT
 GCAAGTCAAGGGCAGCTGATGAATGAGGAGCTGACCGAGAGGCTCTTCTGTGTCTAACGTGGGCACC
 TTGGATCTGGCATCACTGAACCTGCAGAGGGCCGGGATCATGGCTTACCAGACTACAATGAATGGAGAG
 AGTTCTGTGGCTTGTACGCCTGGAGACACCAGCTGAGCTGAACAAGGCCATTGCCAACAGAAGCATGGT
 CAACAAGATAATGGACTTATACAAGCATGCTGACAACATTGACGCTCTGGTTGGGAGGCTTGGCTGAAAAG
 TTCTTGCCGGGGCCCGCACTGGTCTCTGTTTGCATGTATCATTGGGAAGCAGATGAAGGCTCTGAGGG
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 TGGGAAGCTGGTGTGTATACTCCTGTTTCCATGGATACAAGCTGCAGGGCCAGGAGCAGGTACATGT
 ACCCAGAAGGGATGGGACTCCGAACCTCCTGTCTGTAAGATGTTAATGAGTGTGAGATCTGACACACC
 CACCTTGCCACCCCTCTGCACAGTGCAAGAACCAAGGGAAGCTTCCAGTGTGTGTGCACAGACCCCTA
 TGTGCTAGGTGAGGATGAGAAGACCTGCATAGATTCTGGCAGGCTACCTCGGGCATCCTGGGTCTCCATT
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 CTGATAAGAAAGCCATTGCCGATCACAGAGAGAGTGACCACCCAGTCAGGATGCAGAAAGAGTCAGGG
 GAGGGGGATTTACCACACAAGGCCGAGCTCAAGACTGGACAGGAACCTGCAAGTGGATCCAGGGTC
 CTCCTGTGCGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG215425 representing NM_009417
 Red=Cloning site Green=Tags(s)

MRTLGAMAIMLVMGTVIFLSFILRSRDILCGKTMKSHVISAVETSQMLVDHAVYNTMKRNKKREVLSP
 AQLLSFFKLPESTSGAISRAAEIMETSIQVMKREQSQFSTDALSADILGTIANLSGCLPFMLPPRCPTC
 LANKYRPITGACNNRDHPRWASNTALARWLPVYEDGF SQPKGWNPNFLYHGFLPPVREVTRHLIQVS
 NEAVTEDDQYSDFLPVWGQYIDHDIALTPQSTSTAAFVGGVDCQLTCENQNPCFPPIQLPSNSSGTTACLP
 FYRSSAACGTGDQGLFGNLSAANPRQQMNGLTSFLDASTVYGS SPGVEKQLRNWSSSAGLLRVNTHLD
 AGRAYLPFATAACAPEPGTPRTNRTPCFLAGDGRASEVPALAAVHTLWLREHNRLASAFKAINKHSANT
 AYQEARKVVGALHQIITMRDYIPKILGPDAFRQYVGPYEGYNPTVNPTVSNIFSTAAFRFGHATVHPLVR
 RLNTDFQEHTELPRLQLRDVFFRPWRLIQEGGLDPIVRGLLARA AKLQVQGLMNEELTERL FVLSNVGT
 LDLASLNLQRGRDHGLPDYNEWREFCGLSRL ETPAELNKAIANRSMVNKIMDL YKHADNIDVWLGGLAEK
 FLPGARTGPLFACIIGKQMKALRDGRF WENTNVFTDAQRQELEKHS LPRVICDNTGL TRVPVDAFRIG
 KFPQDFESCEDI PSMDLELWRETFPQDDKCVFPEEVDNGNFVHCEE SGKLVLVYSCFHGYK LQGQEQVTC
 TQKGWDEPPVCKDVNECADLTHPPCHPSAQCKNTKGSFQCVCTDPYVLGEDEKTCIDSGR LPRASWVSI
 ALGALLIGGLASLTWIVICR WTHADKKATLPITERVTTQSGCRKSQGRGISPHKAAAQDTGQEPASGRV
 LLCE

TRTRPLE - GFP Tag - V

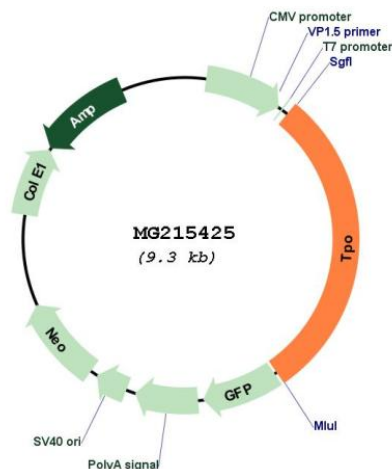
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_009417

ORF Size: 2742 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_009417.3](#), [NP_033443.1](#)

RefSeq Size: 3291 bp

RefSeq ORF: 2745 bp

Locus ID: 22018

UniProt ID: [P35419](#)

Cytogenetics: 12 13.0 cM

Gene Summary:

This gene encodes a membrane-bound glycoprotein. The encoded enzyme plays a central role in thyroid gland function. The enzyme functions in the iodination of tyrosine residues in thyroglobulin and phenoxy-ester formation between pairs of iodinated tyrosines to generate the thyroid hormones, thyroxine and triiodothyronine. Mice with homozygous missense mutations in this gene exhibit hypothyroid dwarfism and hearing impairment. [provided by RefSeq, Sep 2015]