

Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 1, 2025

pcDNA4/TO mTRPM7

RRID:Addgene_45482

Type: Plasmid

Proper Citation

RRID:Addgene_45482

Plasmid Information

URL: <http://www.addgene.org/45482>

Proper Citation: RRID:Addgene_45482

Insert Name: TRPM7

Organism: Mus musculus

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:11385574](https://pubmed.ncbi.nlm.nih.gov/11385574/)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5000; Vector Backbone:pcDNA4/TO (modified); Vector Types:Mammalian Expression, Other, Tetracycline Inducible; Bacterial Resistance:Ampicillin

Comments: For the purpose of expressing LTRPC7 in eukaryotic cells, the depositing lab used PCR to produce an epitope tagged expression construct from two overlapping murine LTRPC7 clones. The LTRPC7 coding sequence was modified by removing the initiating methionine and replacing it with a sequence encoding a Kozak sequence, the FLAG tag and the additional sequence GCGGCCGCAT, and by placing a SpeI site just after the stop codon. These modifications result in an expressed protein which started with the following amino acid sequence: MGDYKDDDDKRPH followed by the murine LTRPC7 coding sequence starting at the second amino acid. This construct is expressed from the pcDNA4/TO vector which provides tetracycline-controlled expression from a CMV promoter.

Plasmid Name: pcDNA4/TO mTRPM7

Record Creation Time: 20220422T222235+0000

Record Last Update: 20221007T233924+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA4/TO mTRPM7.

No alerts have been found for pcDNA4/TO mTRPM7.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 2 mentions in open access literature.

Listed below are recent publications. The full list is available at [FDI Lab - SciCrunch.org](#).

Jiang ZJ, et al. (2021) TRPM7 is critical for short-term synaptic depression by regulating synaptic vesicle endocytosis. *eLife*, 10.

Wei S, et al. (2020) Comparison of Anti-oncotic Effect of TRPM4 Blocking Antibody in Neuron, Astrocyte and Vascular Endothelial Cell Under Hypoxia. *Frontiers in cell and developmental biology*, 8, 562584.