

Product datasheet for **MG200702**

Gpha2 (NM_130453) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Gpha2 (NM_130453) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Gpha2
Synonyms: GPA2; zsig51
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG200702 representing NM_130453
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCATGGCACCAGAGTCTTGCTCCTTTGCCTGCTGGGCCTGGCAGTCACTGAAGGGCATAGCCCAG
AGACAGCCATCCCAGGCTGCCACTTGCACCCCTCAATGTGACGGTGCGCAGTGATCGCCTCGGCACTTG
CCAGGGCTCCACGTGGCACAGGCTGTGTAGGACTGTGAGTCTAGTGCTTCCCTTCCCGTACTCT
GTGCTGGTGGCCAGTGGCTATCGGCACAACATCACCTTCTCTCCAGTGTGCACCATCAGCAGCTCA
GAAAGGTGAGGGTGTGGCTGCAGTGCCTGGGAACCAGCGTGGGAGCTTGAGATCTTACTGCAAGGGC
CTGCCAGTGTGATATGTGCCGTTTCTCCCGCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG200702 representing NM_130453
Red=Cloning site Green=Tags(s)

MPMAPRVLLLCLLGLAVTEGHSPETAIPGCHLHPFNVTVRSDDLGTCCQSHVAQACVGHCESSAFPSRY
VLVASGYRHNITSSSQCTISSLRKVRVWLQCVGNQRGELEIFTARACQCDMCRFSRY

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



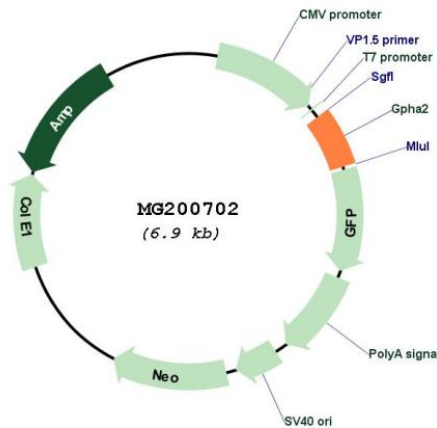
[View online »](#)

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN:

NM_130453

ORF Size:

384 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:	<ol style="list-style-type: none">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:	<u>NM_130453.3</u> , <u>NP_569720.1</u>
RefSeq Size:	626 bp
RefSeq ORF:	387 bp
Locus ID:	170458
UniProt ID:	<u>Q925Q5</u>
Cytogenetics:	19 A
Gene Summary:	Functions as a heterodimeric glycoprotein hormone with GPHB5 able to bind and activate the thyroid-stimulating hormone receptor (TSHR), leading to increased cAMP production. Plays a central role in controlling thyroid cell metabolism.[UniProtKB/Swiss-Prot Function]