

## Product datasheet for **RG209510**

### MASA (ENOPH1) (NM\_021204) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MASA (ENOPH1) (NM_021204) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MASA
Synonyms:	E1; MASA; MST145; mtnC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG209510 representing NM_021204 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTCGTGCTTTCGGTCCCCGCCGAAGTCACCGTGATCCTGTTAGATATCGAAGGTACCACAACCCCGA  
TTGCTTTCGTGAAGGACATTTTATTTTCCTTACATCGAAGAAAATGTTAAAGAGTATCTGCAGACACATTG  
GGAAGAAGAGGAGTGCCAGCAGGATGTCAGTCTTTGAGGAAACAGGCTGAAGAGGACGCCACCTGGAT  
GGGGCTGTTCTATCCCTGCAGCATCTGGGAATGGAGTGGATGATCTGCAACAGATGATCCAGGCCGTGG  
TAGATAATGTGTGCTGGCAGATGTCCTGGATCGAAAGACCACTGCACTCAAACAGCTGCAGGGCCACAT  
GTGGAGGGCGGCATTACAGCTGGGCGCATGAAAGCAGAGTTCCTTGCAGATGTAGTTCACAGCAGTCAGG  
AAGTGGAGAGAGGCCGAATGAAGGTGTACATCTATTCCTCAGGGAGTGTGGAGGCACAGAACTGTTAT  
TCGGGCATTCTACGGAGGGAGATATTCTTGAGCTTGTGATGGTCACTTTGATACCAAGATTGGACACAA  
AGTAGAGAGTGAAAGTTACCGAAAGATTGCAGACAGCATTGGGTGCTCAACCAACAACATTTTGTTCG  
ACAGATGTTACTCGAGAGGCCAGTGCTGCTGAGGAAGCAGATGTGCACGTAGCTGTGGTGGTGAGACCAG  
GCAACGCAGGATTAACAGATGATGAGAAGACTTACTACAGCCTCATCACATCCTTCAGTGAACCTATACCT  
GCCTTCCTCAACC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG209510 representing NM\_021204  
Red=Cloning site Green=Tags(s)

MVLSVPAEVTVILLDIEGTTTPIAFVKDILFPYIEENVKEYLQTHWEEECQQDVSLLRKQAEEDAHL  
 GAVPIPAASGNGVDDLQQMIQAVVDNVCWQMSLDRKTTALKQLQGHMWRAAFTAGRMKAEFFADVPAVR  
 KWREAGMKVYIYSSGSVEAQKLLFGHSTEGDILELVDGHFDTKIGHKVESESYRKIADSIGCSTNNILFL  
 TDVTREASAAEEADVHVAVVVRPGNAGLTDDEKTYYSLITSFSELYLPSST

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_021204

**ORF Size:** 783 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\\_021204.5](#)

**RefSeq Size:** 1992 bp

**RefSeq ORF:** 786 bp

**Locus ID:** 58478

**UniProt ID:** [Q9UHY7](#)

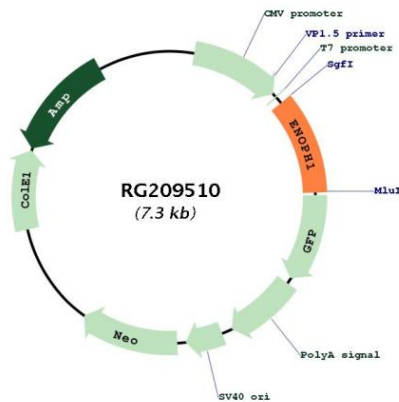
**Cytogenetics:** 4q21.22

**Domains:** Hydrolase

**Protein Pathways:** Cysteine and methionine metabolism

**Gene Summary:** Bifunctional enzyme that catalyzes the enolization of 2,3-diketo-5-methylthiopentyl-1-phosphate (DK-MTP-1-P) into the intermediate 2-hydroxy-3-keto-5-methylthiopentenyl-1-phosphate (HK-MTPenyl-1-P), which is then dephosphorylated to form the acireductone 1,2-dihydroxy-3-keto-5-methylthiopentene (DHK-MTPene).[UniProtKB/Swiss-Prot Function]

## Product images:



Circular map for RG209510