

## Product datasheet for **RC203290**

### **MGST3 (NM\_004528) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MGST3 (NM\_004528) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MGST3  
**Synonyms:** GST-III  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC203290 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTGTCTCTCTAAGGAATATGGTTTTGTGCTTCTAACTGGTGCTGCCAGCTTTATAATGGTGGCCC  
ACCTAGCCATCAATGTTTCCAAGCCCCGAAGAAGTACAAAGTGGAGTATCCTATCATGTACAGCACGGA  
CCCTGAAAATGGGCACATCTTCACTGCATTACGCGAGCCACCAGAACACGTTGGAAGTGTATCCTCCC  
TTCTTATTTTTCTAGCTGTTGGAGGTGTTACCACCCGCGTATAGCTTCTGGCCTGGGCTTGGCCTGGA  
TTGTTGGACGAGTCTTTATGCTTACGGCTATTACACGGGAGAACCCAGCAAGCGTAGTCGAGGAGCCCT  
GGGTCCATCGCCCTCCTGGGCTTGGTGGGCACAACACTGTGTGCTCTGCTTCCAGCATCTTGTTGGGT  
AAAAGTGGCTTGGCAGTGGACCAAATGCTGCCAT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203290 protein sequence  
Red=Cloning site Green=Tags(s)  
MAVLSKEYGFVLLTGAASFIMVAHLAINVSKARKKYKVEYPIMYSTDPENGHIFNCIQRAHQNTLEVYPP  
FLFFLAVGGVYHPRIASGLGLAWIVGRVLYAYGYTGEPSKRSRGGALGSIALLGLVGTTCVSAFQHLGWV  
KSGLGSGPKCCH

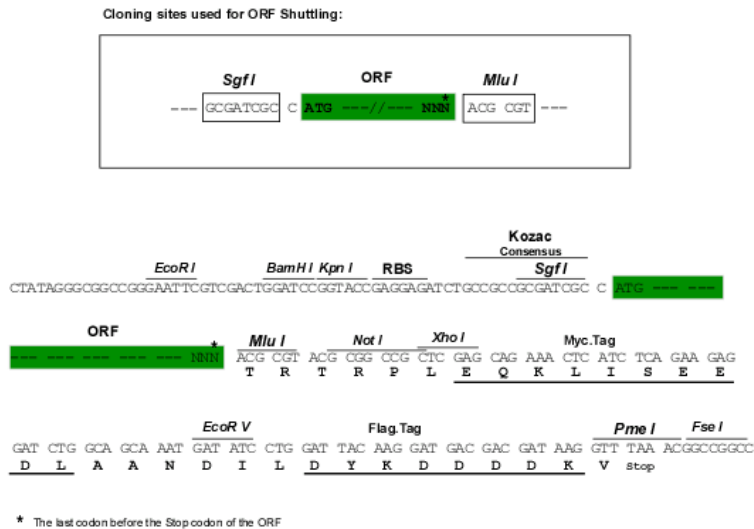
**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6417\\_d09.zip](https://cdn.origene.com/chromatograms/mk6417_d09.zip)



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_004528

ORF Size: 456 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\\_004528.4](#)

RefSeq Size: 1528 bp

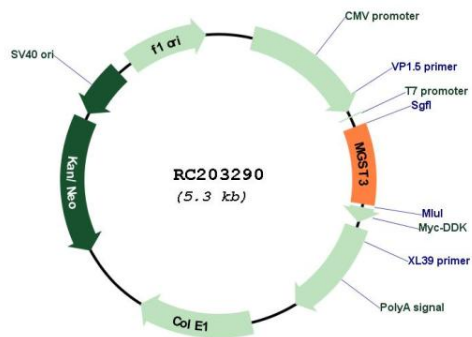
RefSeq ORF: 459 bp

Locus ID: 4259

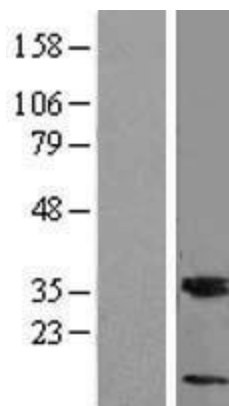
**UniProt ID:** [O14880](#)  
**Cytogenetics:** 1q24.1  
**Domains:** MAPEG  
**Protein Families:** Druggable Genome, Transmembrane  
**Protein Pathways:** Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by cytochrome P450  
**MW:** 16.5 kDa

**Gene Summary:** This gene encodes a member of the MAPEG (Membrane Associated Proteins in Eicosanoid and Glutathione metabolism) protein family. Members of this family are involved in the production of leukotrienes and prostaglandin E, important mediators of inflammation. This gene encodes an enzyme which catalyzes the conjugation of leukotriene A4 and reduced glutathione to produce leukotriene C4. This enzyme also demonstrates glutathione-dependent peroxidase activity towards lipid hydroperoxides.[provided by RefSeq, May 2011]

### Product images:



Circular map for RC203290



Western blot validation of overexpression lysate (Cat# [LY417903]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203290 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).