

## Product datasheet for **RG202405**

### Prostaglandin E Synthase (PTGES) (NM\_004878) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Prostaglandin E Synthase (PTGES) (NM\_004878) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Prostaglandin E Synthase  
**Synonyms:** MGST-IV; MGST1-L1; MGST1L1; MPGES; mPGES-1; PGES; PIG12; PP102; PP1294; TP53112  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG202405 representing NM\_004878  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTGCCACAGCCTGGTGTAGAGCAGCCCGCCCTCCCGCCTTCTGCTCTGCAGCAGCTGCTGG  
 TCATCAAGATGTACGTGGTGGCCATCATCAGGGCCAAGTGAGGCTGCGGAAGAAGGCCTTTGCCAAACC  
 CGAGGATGCCCTGAGACACGGAGGCCCCAGTATTGCAGGAGCGACCCGACGTGGAACGCTGCCTCAGG  
 GCCACCGGAACGACATGGAGACCATCTACCCCTTCTTTCTGGGCTTCGTCTACTCCTTTCTGGGTC  
 CTAACCCTTTTGTCGCTGGATGCACTTCTGGTCTTCTCGTGGCCGTGTGGCACACACCGTGGCCTA  
 CCTGGGAAGCTGCGGGACCCATCCGCTCCGTGACCTACACCTGGCCAGCTCCCTGCGCCTCCATG  
 GCTCTGCAGATCCTCTGGGAAGCGGCCGCCACCTG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG202405 representing NM\_004878  
 Red=Cloning site Green=Tags(s)

MPAHSVMSSPALPAFLLCSTLLVIKMYVVAIITGQVRLRKKAFANPEDALRHGGPQYCRSDPDVERCLR  
 AHRNDMETIYPFLFLGFVYSFLGPNPFVAMHFLVFLVGRVAHTVAYLGKLRAPIRSVTYTLAQLPCASM  
 ALQILWEAARHL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_004878

**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\\_004878.5](#)

**RefSeq Size:** 1805 bp

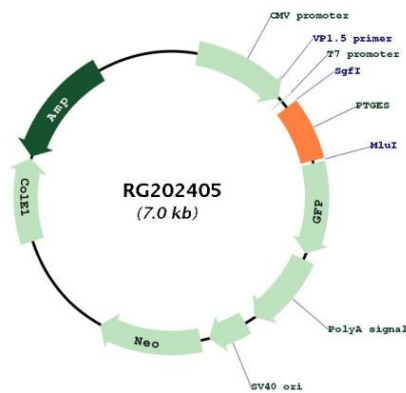
**RefSeq ORF:** 459 bp

**Locus ID:** 9536

**UniProt ID:** [O14684](#)

|                          |   |
|--------------------------|---|
| <b>Cytogenetics:</b>     | 9q34.11   |
| <b>Domains:</b>          | MAPEG   |
| <b>Protein Families:</b> | Druggable Genome, Transmembrane   |
| <b>Protein Pathways:</b> | Arachidonic acid metabolism, Metabolic pathways   |
| <b>Gene Summary:</b>     | The protein encoded by this gene is a glutathione-dependent prostaglandin E synthase. The expression of this gene has been shown to be induced by proinflammatory cytokine interleukin 1 beta (IL1B). Its expression can also be induced by tumor suppressor protein TP53, and may be involved in TP53 induced apoptosis. Knockout studies in mice suggest that this gene may contribute to the pathogenesis of collagen-induced arthritis and mediate acute pain during inflammatory responses. [provided by RefSeq, Jul 2008] |

**Product images:**



Circular map for RG202405