

Product datasheet for RC221207

PTGES2 (NM_025072) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTGES2 (NM_025072) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTGES2
Synonyms:	C9orf15; GBF-1; GBF1; mPGES-2; PGES2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221207 representing NM_025072 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGACCCGGCTGCGCGGGTGGTGC GGCGCTGTGGCCTGGTGGGTGCGCCTTGGCCTGGAGGCTGGGAG
GCCGCCCCAGCCGCTGCTACCCACGCAGAGCCGGGCTGGCTTCGCGGGGGCGCGGGCGGCCGAGCCC
CGTGGCTGCAGCTCGTAAGGGGAGCCCGCGGCTGCTGGGAGCTGCGGCGCTGGCCCTGGGGGAGCCCTG
GGGCTGTACCACACGGCGCGGTGGCACCTGCGGCCAGGACCTCCACGCAGAGCGCTCAGCCGCGCAGC
TCTCCCTGTCCAGCCGCTGCAGCTGACCTGTACCAGTACAAGACGTGTCCCTTCTGCAGCAAGGTCCG
AGCCTTCCCTCGACTTCCATGCCCTGCCCTACCAGGTGGTGGAGGTGAACCCTGTGCGCAGGGCTGAGATC
AAGTTCTCCTCCTACAGAAAGGTGCCATCCTGGTGGCCAGGAAGGAGAAAGCTCGCAACAATAATG
ACTCCTCTGTCATCATCAGCGCCCTCAAGACCTACCTGGTGTGCGGGCAGCCCTGGAAGAGATCATCAC
CTACTACCCAGCCATGAAGGCTGTGAACGAGCAGGGCAAGGAGGTGACCGAGTTCGGCAATAAGTACTGG
CTCATGCTCAACGAGAAGGAGGCCAGCAAGTGTATGGTGGGAAGGAGGCCAGGACGGAGGAGATGAAGT
GGCGGCAGTGGGCGGACGACTGGCTGGTGCACCTGATCTCCCAATGTGTACCGCACGCCACCCAGGGC
TCTGGCGTCTTTGACTACATTGTCCGCGAGGGCAAGTTCGGAGCCGTGGAGGGTGCCGTGGCCAAGTAC
ATGGGTGCAGCGCCATGTACCTCATCAGCAAGCGACTCAAGAGCAGGCACCGCCTCCAGGACAACGTGC
GCGAGGACCTCTATGAGGCTGCTGACAAGTGGGTGGCTGCTGTGGCAAGGACCGCCCTTCATGGGGGG
CCAGAAGCCAATCTCGCTGATTTGGCGGTGTATGGCGTGTGATGGAGGGGCTGGATGCATTC
GATGACCTGATGCAGCACACGCACATCCAGCCCTGGTACCTGCGGGTGGAGAGGGCCATACCGAGGCT
CCCCAGCGCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC221207 representing NM_025072
Red=Cloning site Green=Tags(s)

MDPAARVVRALWPGGCALAWRLGGRPQPLLPTQSRAGFAGAAGGPPVAAARKGSPRLLGAAALALGGAL
 GLYHTARWHLRAQDLHAERSAAQLSLSSRLQLTLYQYKTCPFCSKVRAFDFHALPYQVVEVNPVRRAEI
 KFSSYRKVPILVAQEGESSQQLNDSSVIIISALKTYLVSGQPLEEIIITYYPAMKAVNEQGKEVTEFGNKYW
 LMLNEKEAQQVYGGKEARTEEMKWRQWADDLWHLISPNVYRTPTEALASFDYIVREGKFGAVEGAVAKY
 MGAAMYLI SKRLKSRHRLQDNVREDLYEAADKWVAAVGKDRPFMGGQKPNLADLAVYGVLRVMEGLDAF
 DDLMQHTHIQPWYLRVERAITEASPAH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6044_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_025072

ORF Size: 1131 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_025072.4](#), [NP_079348.1](#)

RefSeq Size: 2120 bp

RefSeq ORF: 1134 bp

Locus ID: 80142

UniProt ID: [Q9H7Z7](#)

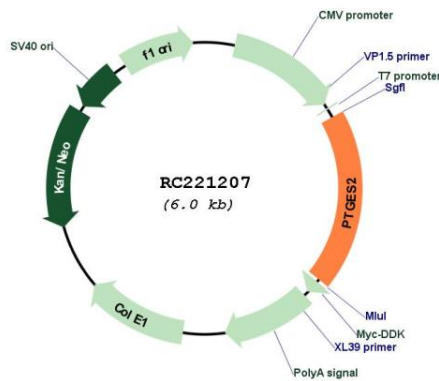
Cytogenetics: 9q34.11

Protein Pathways: Arachidonic acid metabolism, Metabolic pathways

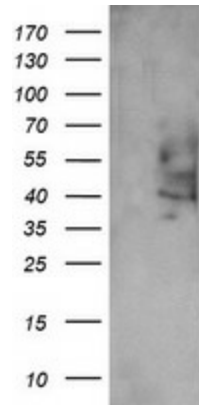
MW: 41.8 kDa

Gene Summary: The protein encoded by this gene is a membrane-associated prostaglandin E synthase, which catalyzes the conversion of prostaglandin H2 to prostaglandin E2. This protein also has been shown to activate the transcription regulated by a gamma-interferon-activated transcription element (GATE). Multiple transcript variants have been found for this gene. [provided by RefSeq, Jun 2009]

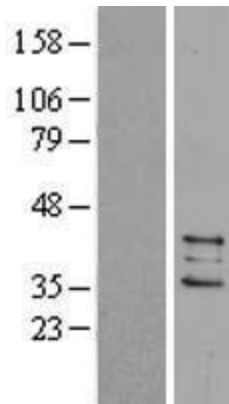
Product images:



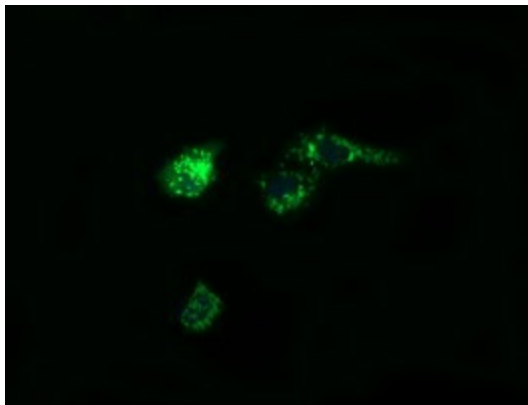
Circular map for RC221207



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PTGES2 (Cat# RC221207, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTGES2 (Cat# [TA505412]). Positive lysates [LY403045] (100ug) and [LC403045] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403045]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221207 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Anti-PTGES2 mouse monoclonal antibody ([TA505412]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PTGES2 (RC221207).