

## Product datasheet for **SC119558**

### Prostaglandin D Synthase (PTGDS) (NM\_000954) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Prostaglandin D Synthase (PTGDS) (NM_000954) Human Untagged Clone
Tag:	Tag Free
Symbol:	Prostaglandin D Synthase
Synonyms:	L-PGDS; LPGDS; PDS; PGD2; PGDS; PGDS2
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119558 sequence for NM_000954 edited (data generated by NextGen Sequencing) ATGGCTACTCATCACACGCTGTGGATGGGACTGGCCCTGCTGGGGGTGCTGGGCGACCTG CAGGCAGCACCGAGGCCAGGTCTCCGTGCAGCCCAACTCCAGCAGGACAAGTTCCTG GGGCGCTGGTTCAGCGCGGGCCTCGCCTCCAACCTCGAGCTGGCTCCGGGAGAAGAAGCG GCGTTGTCCATGTGCAAGTCTGTGGTGGCCCTGCCACGGATGGTGGCCTCAACCTGACC TCCACCTTCTCAGGAAAAACAGTGTGAGACCCGAACCATGCTGCTGCAGCCCGCGGGG TCCCTCGGCTCTACAGTACCGGAGTCCCCTGGGGCAGCACCTACTCCGTGTCAGTG GTGGAGACCGACTACGACCAGTACGCGCTGCTGTACAGCCAGGGCAGCAAGGGCCCTGGC GAGGACTTCCGCATGGCCACCCTCTACAGCCGAACCCAGACCCCGGGCTGAGTTAAAG GAGAAATTCACCGCCTTCTGCAAGGCCAGGGCTTCACAGAGGATACCATTGTCTTCTG CCCCAAACCGATAAGTGCATGACGGAACAATAG

Clone variation with respect to NM\_000954.5



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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for NM_000954 unedited TGTAATACGACTCACTTATAGGGCGGCCGCGATTTCGGCACGAGGCTCGCTCTCCACACC ACTGGCACCAGGCCCGGACACCCGCTCTGCTGCAGGAGAATGGCTACTCATCACACGCT GTGGATGGGACTGGCCCTGCTGGGGGTGCTGGGCGACCTGCAGGCAGCACCGGAGGCCCA GGTCTCCGTGCAGCCAACTTCCAGCAGGACAAGTTCTGGGGCGCTGGTTCAGCGCGGG CCTCGCTCCAACCTCGAGCTGGCTCCGGGAGAAGAAGCGGCGTTGTCCATGTGCAAGTC TGTGGTGGCCCTGCCACGGATGGTGGCCTCAACCTGACCTCCACCTTCCCTCAGGAAAAA CCAGTGTGAGACCCGAACCATGCTGCTGCAGCCGCGGGTCCCTCGGCTCCTACAGCTA CCGGAGTCCCCACTGGGGCAGCACCTACTCCGTGTCAGTGGTGGAGACCGACTACGACCA GTACGCGTGTGTACAGCCAGGGCAGCAAGGGCCCTGGCGAGGACTTCCGCATGGCCAC CCTCTACAGCCGAACCCAGACCCCGAGGCTGAGTTAAAGGAGAAATTCACCGCCTTCTG CAAGGCCAGGGCTTACAGAGGATACCATTGTCTTCTGCCCAAACCGATAAGTGCAT GACGGAACAATAGGACTCCCGAGGCTGAAGCTGGGATCCCGCCAGCCAGTACCCCC ACGCTCTGGATGTCTCTGCTCTGGTTCTTTCCCGAAGCCCTGCCCCCGCTNCCCGCCA AAGCACCCCTGCCCACTCGGGCTTTATCCTGCACANATAAACTCCGGAAGCAGTCAAAA AAAAAAAAAAAAAAGTCTAGATTGGGGCCGGTTCATAGCTTCTGAACAGATCC GGNTGGCATCCTGGGACCN
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_000954
<b>Insert Size:</b>	1880 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_000954.5</a> , <a href="#">NP_000945.3</a>
<b>RefSeq Size:</b>	837 bp
<b>RefSeq ORF:</b>	573 bp
<b>Locus ID:</b>	5730
<b>UniProt ID:</b>	<a href="#">P41222</a>
<b>Cytogenetics:</b>	9q34.3
<b>Domains:</b>	lipocalin
<b>Protein Pathways:</b>	Arachidonic acid metabolism, Metabolic pathways

**Gene Summary:**

The protein encoded by this gene is a glutathione-independent prostaglandin D synthase that catalyzes the conversion of prostaglandin H<sub>2</sub> (PGH<sub>2</sub>) to prostaglandin D<sub>2</sub> (PGD<sub>2</sub>). PGD<sub>2</sub> functions as a neuromodulator as well as a trophic factor in the central nervous system. PGD<sub>2</sub> is also involved in smooth muscle contraction/relaxation and is a potent inhibitor of platelet aggregation. This gene is preferentially expressed in brain. Studies with transgenic mice overexpressing this gene suggest that this gene may be also involved in the regulation of non-rapid eye movement sleep. [provided by RefSeq, Jul 2008]