EMPOWER YOUR RESEARCH

## Product datasheet for RC216795L1

## Prostaglandin D Synthase (PTGDS) (NM_000954) Human Tagged Lenti ORF Clone

## Product data:

## Product Type: Expression Plasmids

Product Name:
Tag:
Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

ORF Nucleotide
Sequence:
Restriction Sites:
Cloning Scheme:

Prostaglandin D Synthase (PTGDS) (NM_000954) Human Tagged Lenti ORF Clone
Myc-DDK
Prostaglandin D Synthase
L-PGDS; LPGDS; PDS; PGD2; PGDS; PGDS2
None
pLenti-C-Myc-DDK (PS100064)
Chloramphenicol ( $34 \mathrm{ug} / \mathrm{mL}$ )
The ORF insert of this clone is exactly the same as(RC216795).

Sgfl-Mlul

Cloning sites used for ORF Shuttling:


DDK.Tag
GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TAA ACGGCCGGCC
D L A A N D I L D Y K
*The last codon before the Stop codon of the ORF.
ACCN:
ORF Size:
NM_000954
570 bp

OTI Disclaimer:

OTI Annotation:

Components:

Reconstitution Method: 1. Centrifuge at $5,000 \times \mathrm{x}$ for 5 min .
2. Carefully open the tube and add 100 ul 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 5000 xg ) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$.
RefSeq:
RefSeq Size:
NM 000954.5 NP 000945.3
837 bp
RefSeq ORF: 573 bp
Locus ID: 5730
UniProt ID: $\quad \underline{91222}$
Cytogenetics: 9q34.3
Domains: lipocalin
Protein Pathways: Arachidonic acid metabolism, Metabolic pathways
MW:
Gene Summary:
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

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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).

|  | 2. Carefully open the tube and add 100 ul of sterile water to dissolve the DNA. <br> 3. Close the tube and incubate for 10 minutes at room temperature. <br> 4. Briefly vortex the tube and then do a quick spin (less than 5000 xg ) to concentrate the liquid at the bottom. <br> 5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$. |
| :---: | :---: |
| RefSeq: | NM 000954.5 NP 000945.3 |
| RefSeq Size: | 837 bp |
| RefSeq ORF: | 573 bp |
| Locus ID: | 5730 |
| UniProt ID: | P41222 |
| Cytogenetics: | 9 q 34.3 |
| Domains: | lipocalin |
| Protein Pathways: | Arachidonic acid metabolism, Metabolic pathways |
| MW: | 20.8 kDa |
| Gene Summary: | The protein encoded by this gene is a glutathione-independent prostaglandin $D$ synthase that catalyzes the conversion of prostaglandin H 2 (PGH2) to postaglandin D2 (PGD2). PGD2 functions as a neuromodulator as well as a trophic factor in the central nervous system. PGD2 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] |

## Product images:



Circular map for RC216795L1


Double digestion of RC216795L1 using Sgfl and Mlul

