

Product datasheet for RC220625L1

OriGene Technologies, Inc.

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Glucose 6 Phosphate Dehydrogenase (G6PD) (NM_000402) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Glucose 6 Phosphate Dehydrogenase (G6PD) (NM_000402) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Glucose 6 Phosphate Dehydrogenase

Synonyms: G6PD1

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC220625).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_000402

ORF Size: 1635 bp





Glucose 6 Phosphate Dehydrogenase (G6PD) (NM_000402) Human Tagged Lenti ORF Clone – RC220625L1

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: <u>NM 000402.3</u>, <u>NP 000393.4</u>

 RefSeq Size:
 2395 bp

 RefSeq ORF:
 1638 bp

 Locus ID:
 2539

 UniProt ID:
 P11413

Cytogenetics: Xq28

Domains: G6PD

Protein Families: Druggable Genome

Protein Pathways: Glutathione metabolism, Metabolic pathways, Pentose phosphate pathway

MW: 62.3 kDa

Gene Summary: This gene encodes glucose-6-phosphate dehydrogenase. This protein is a cytosolic enzyme

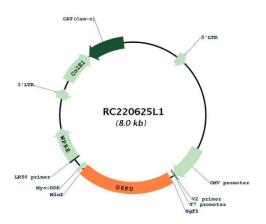
encoded by a housekeeping X-linked gene whose main function is to produce NADPH, a key

electron donor in the defense against oxidizing agents and in reductive biosynthetic reactions. G6PD is remarkable for its genetic diversity. Many variants of G6PD, mostly

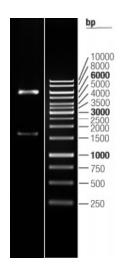
produced from missense mutations, have been described with wide ranging levels of enzyme activity and associated clinical symptoms. G6PD deficiency may cause neonatal jaundice, acute hemolysis, or severe chronic non-spherocytic hemolytic anemia. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC220625L1



Double digestion of RC220625L1 using Sgfl and Mlul