

Product datasheet for RC216080L4

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

P Glycoprotein (ABCB1) (NM_000927) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: P Glycoprotein (ABCB1) (NM 000927) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: P Glycoprotein

Synonyms: ABC20; CD243; CLCS; GP170; MDR1; p-170; P-GP; PGY1

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC216080).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_000927

ORF Size: 3840 bp



P Glycoprotein (ABCB1) (NM_000927) Human Tagged Lenti ORF Clone - RC216080L4

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 000927.3</u>

 RefSeq Size:
 4872 bp

 RefSeq ORF:
 3843 bp

 Locus ID:
 5243

 UniProt ID:
 P08183

Cytogenetics: 7q21.12

Domains: ABC membrane, ABC tran, AAA

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: ABC transporters

MW: 141.3 kDa

Gene Summary: The membrane-associated protein encoded by this gene is a member of the superfamily of

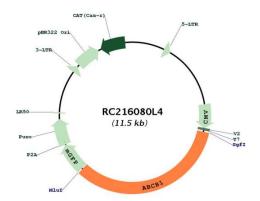
ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. The protein encoded by this gene is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug

accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood-brain barrier. Mutations in this gene are associated with colchicine resistance and Inflammatory bowel disease 13. Alternative splicing and the use of alternative promoters results in multiple

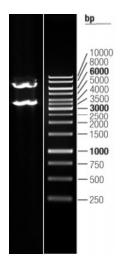
transcript variants. [provided by RefSeq, Feb 2017]



Product images:



Circular map for RC216080L4



Double digestion of RC216080L4 using Sgfl and Mlul