Rat PRL-2/PTP4A2 Gene ORF cDNA clone in cloning vector

Catalog Number:  RG87630-U

General Information

Gene:  protein tyrosine phosphatase type IVA, member 2
Official Symbol:  PTP4A2
Synonym:  PTP4A2
Source:  Rat
cDNA Size:  504bp
RefSeq:  BC060549.1
Plasmid:  pUC19-ratPTP4A2

Description

Lot:  Please refer to the label on the tube
Sequence Description:  Identical with the Gene Bank Ref. ID sequence.
Vector:  pUC19
Shipping carrier:
Each tube contains approximately 10 μg of lyophilized plasmid.
Storage:  The lyophilized plasmid can be stored at ambient temperature for three months.

Plasmid Resuspension protocol

1. Centrifuge at 5,000 × g for 5 min.
2. Carefully open the tube and add 100 μl 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 to concentrate the liquid at the bottom. Speed is less than 5000 × g.
5. Store the plasmid at -20 °C.

The plasmid is ready for:
• Restriction enzyme digestion
• PCR amplification
• E. coli transformation
• DNA sequencing

E.coli strains for transformation (recommended but not limited)

Most commercially available competent cells are appropriate for the plasmid, e.g. TOP10, DH5α and TOP10F’.

Sequencing primer list:

M13-47:  5’ GCCAGGGTTTCCCAGTCACGAC 3’
RV-M:   5’ GAGCGGATAACATTTTCACACAGG 3’

Other M13 primers can also be used as sequencing primers.
Vector Information

pUC19 is a small, high-copy number E. coli plasmid cloning vector, of which multiple cloning sites as shown below. The molecule is a small double-stranded circle, 2686 base pairs in length. pUC19 encodes the N-terminal fragment of β-galactosidase (lacZa), which allows for blue/white colony screening (i.e., α-complementation), as well as a pUC origin of replication.

Physical Map of pUC19-ORF:

Notes: The full-length cDNA sequence included of 5' UTR and 3' UTR region. And UTR nucleotide is ranging from a few dozens to thousands of base pairs in size. Only ORF sequence is displayed. We strongly recommended only use gene specific primers for sequencing or PCR to subclone but not restriction enzyme digestion.