

Product datasheet for RC220107

PBR (TSPO) (NM_000714) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PBR (TSPO) (NM_000714) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PBR
Synonyms: BPBS; BZRP; DBI; IBP; MBR; mDRC; PBR; PBS; pk18; PKBS; PTBR
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC220107 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCCGCCCTGGGTGCCCGCCATGGGCTTCACGCTGGCGCCAGCCTGGGGTCTTCGTGGGCTCCC
GCTTTGTCCACGGCGAGGGTCTCCGCTGGTACGCCGGCTGCAGAAGCCCTCGTGGCACCCGCCCACTG
GGTGTGGGCCCTGTCTGGGACGCTCTACTCAGCCATGGGGTACGGCTCCTACCTGGTCTGAAAGAG
CTGGGAGGCTTACAGAGAAGGCTGTGGTCCCTGGGCTCTACTGGCAGCTGGCCCTGAAGTGGG
CATGGCCCCCATCTTTGGTGGCCGACAAATGGGCTGGGCTGGTGGATCTCTGCTGGTCACTGG
GGCGGGCGCAGCCACTACCGTGGCTGGTACCAGGTGAGCCCGCTGGCCGCCCGCTGCTACCCCTAC
CTGGCCTGGCTGGCTTCGCGACCACACTCAACTACTGCGTATGGCGGGACAACCATGGCTGGCATGGG
GACGGCGGCTGCCAGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220107 protein sequence
Red=Cloning site Green=Tags(s)
MAPPWVPAMGFTLAPSLGCFVGSRFVHGEGLRWYAGLQKPSWHPHWLGPVWGTLYSAMGYGSYLWVKE
LGGFTEKAVVPLGLYTQQLALNWAWPPIFFGARQMGWALVDLLLVSAAAATTVAWYQVSPLAARLLYPY
LAWLAFATTLNYCVWRDNHGHGRRRLPE

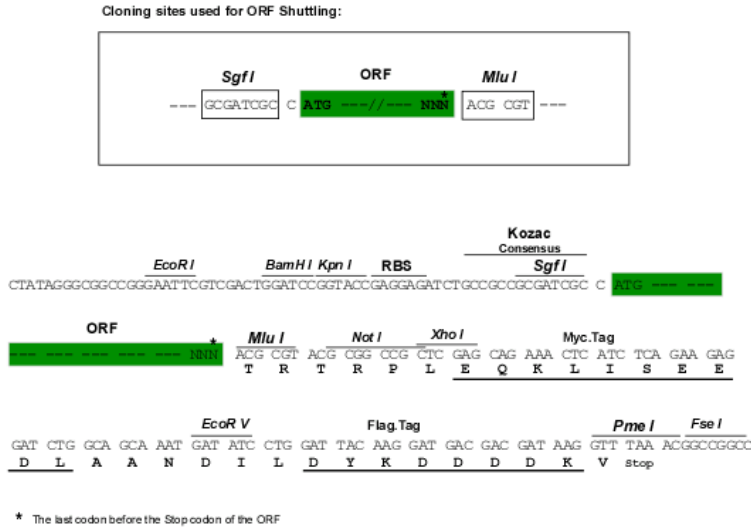
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6385_d06.zip



Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000714

ORF Size: 507 bp

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000714.3](#)

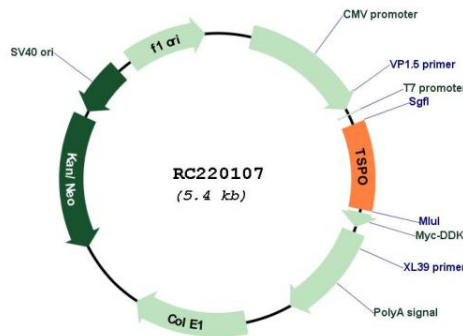
RefSeq Size: 921 bp

RefSeq ORF: 510 bp

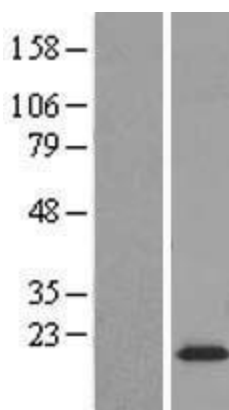
Locus ID: 706
UniProt ID: [P30536](#)
Cytogenetics: 22q13.2
Domains: TspO_MBR
Protein Families: Druggable Genome, Transmembrane
Protein Pathways: Neuroactive ligand-receptor interaction
MW: 18.8 kDa

Gene Summary: Present mainly in the mitochondrial compartment of peripheral tissues, the protein encoded by this gene interacts with some benzodiazepines and has different affinities than its endogenous counterpart. The protein is a key factor in the flow of cholesterol into mitochondria to permit the initiation of steroid hormone synthesis. Alternatively spliced transcript variants have been reported; one of the variants lacks an internal exon and is considered non-coding, and the other variants encode the same protein. [provided by RefSeq, Feb 2012]

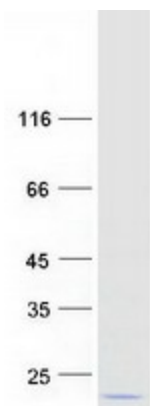
Product images:



Circular map for RC220107



Western blot validation of overexpression lysate (Cat# [LY424543]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220107 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TSPO protein (Cat# [TP320107]). The protein was produced from HEK293T cells transfected with TSPO cDNA clone (Cat# RC220107) using MegaTran 2.0 (Cat# [TT210002]).