Product Datasheet

PBR Rabbit mAb

Catalog No: #48605

Package Size: #48605-1 50ul #48605-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

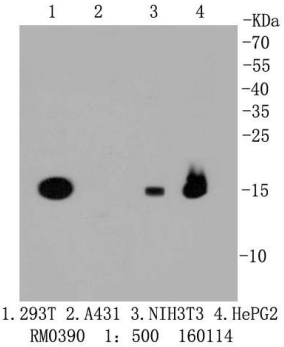
Description

Product Name	PBR Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SA90-03
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Human;Mouse
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	Benzodiazapine receptor (peripheral) antibody Benzodiazepine peripheral binding site antibody BPBS antibody BZRP antibody DBI antibody IBP antibody Isoquinoline carboxamide-binding protein antibody MBR antibody mDRC antibody Mitochondrial benzodiazepine receptor antibody PBR antibody PBS antibody Peripheral benzodiazepine receptor antibody Peripheral benzodiazepine receptor-related protein antibody Peripheral type benzodiazepine receptor antibody Peripheral-type benzodiazepine receptor antibody pk18 antibody PKBS antibody PTBR antibody Ptbzr antibody PTBZR02 antibody RATPTBZR02 antibody translocator protein (18kDa) antibody Translocator protein antibody Tspo antibody Tspo1 antibody TSPOA_HUMAN antibody
Accession No.	Swiss-Prot#:P30536
Calculated MW	18 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

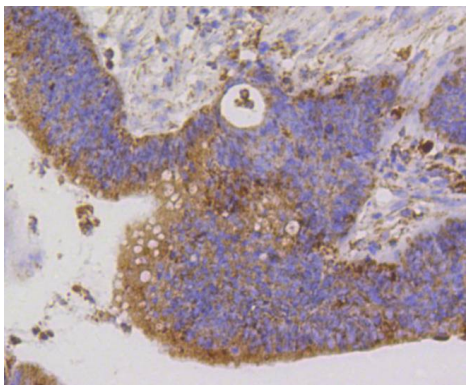
Application Details

WB: 1:1,000-5,000IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:10-1:100

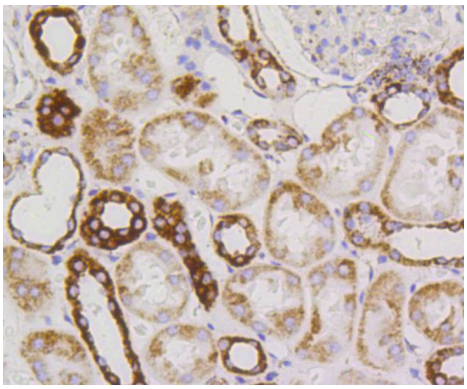
Images



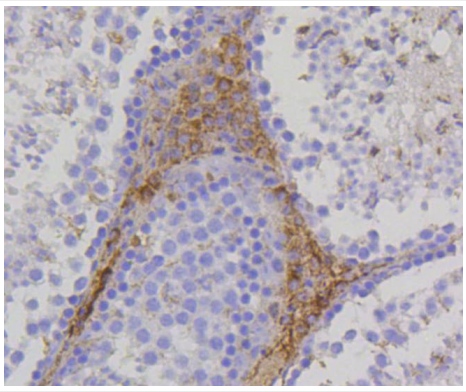
Western blot analysis of PBR on different cell lysates using anti-PBR antibody at 1/1,000 dilution. Positive control:
Lane 1: 293T
Lane 2: NIH/3T3
Lane 3: HepG2



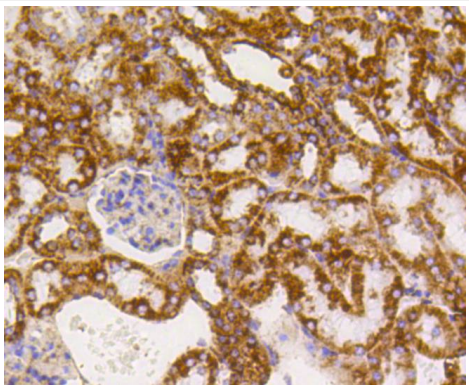
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-PBR antibody. Counter stained with hematoxylin.



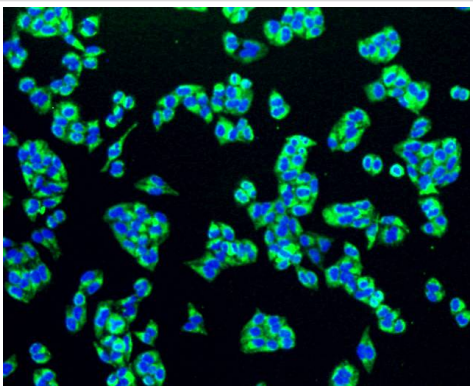
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-PBR antibody. Counter stained with hematoxylin.



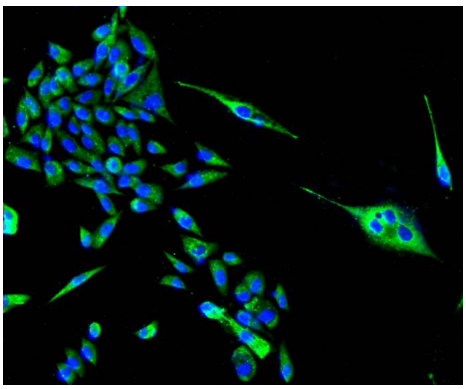
Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-PBR antibody. Counter stained with hematoxylin.



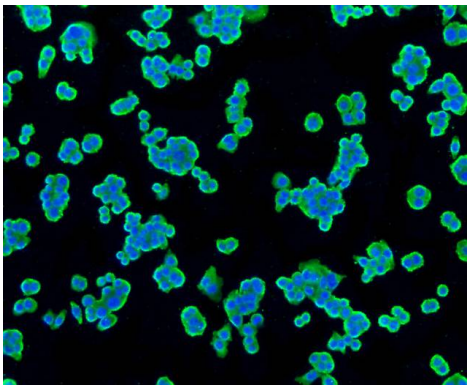
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-PBR antibody. Counter stained with hematoxylin.



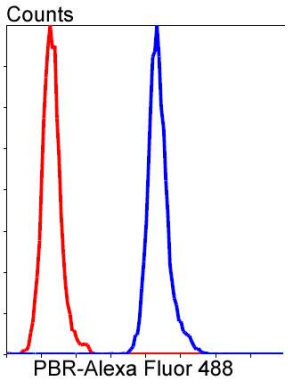
ICC staining PBR in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining PBR in PC-3M cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining PBR in SW480 cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Hela cells with PBR antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

Mitochondrial peripheral-type benzodiazepine receptor (PBR) is an indispensable element of the steroidogenic machinery, where it mediates the delivery of cholesterol to the inner mitochondrial side chain cleavage cytochrome P-450 upon ligand activation. PBR is composed of three subunits, an isoquinoline binding site, a voltage-dependent anion channel and an adenine nucleotide carrier. PBR is genetically conserved from bacteria to humans and in humans is widely expressed in peripheral organs, whereas in the brain, it is sparse and located mainly in glial cells. Peroxisome proliferator perfluordecanoic acid (PFDA) inhibits the Leydig cell steroidogenesis by affecting PBR mRNA stability, thus inhibiting PBR expression, cholesterol transport into the mitochondria and subsequent steroid formation. A cytoplasmic protein, PRAX-1 (peripheral benzodiazepine receptor-associated protein 1), is found to specifically interact with PBR. The polypeptide diazepam binding inhibitor is an endogenous PBR ligand. PBR also binds Ro 5-4864 (4oΩ½oΩ½-chlorodiazepam) and PK 11185 (an isoquinoline carboxamide derivative), but not clonazepam, and PBR regulates the cholesterol transport that results in decreased circulating corticosterone levels.

References

1. ToΩ½oΩ½th M et al. Acute neuroinflammation in a clinically relevant focal cortical ischemic stroke model in rat: longitudinal positron emission tomography and immunofluorescent tracking. Brain Struct Funct N/A:N/A (2015).
2. Banati RB et al. Positron emission tomography and functional characterization of a complete PBR/TSPO knockout. Nat Commun 5:5452 (2014).

Published Papers

el at., Single-cell analysis reveals the immune heterogeneity and interactions in lungs undergoing hepatic ischemia-reperfusionInInt ImmunopharmacolOn2023 NovbyChen Zhang1,Mingwei Sheng2, et al..PMID:37844464, , (2023)

PMID:37844464

Note: This product is for in vitro research use only and is not intended for use in humans or animals.