



# Rabbit Anti-TSPO monoclonal antibody, clone TB01-14 (CABT-L565)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                              |                                                                                                                                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Target</b>                | PBR                                                                                                                                  |
| <b>Immunogen</b>             | Recombinant protein                                                                                                                  |
| <b>Isotype</b>               | IgG                                                                                                                                  |
| <b>Source/Host</b>           | Rabbit                                                                                                                               |
| <b>Species Reactivity</b>    | Human, Mouse                                                                                                                         |
| <b>Clone</b>                 | TB01-14                                                                                                                              |
| <b>Purification</b>          | Protein A purified.                                                                                                                  |
| <b>Conjugate</b>             | Unconjugated                                                                                                                         |
| <b>Applications</b>          | WB, ICC/IF, IHC, IP, FC                                                                                                              |
| <b>Molecular Weight</b>      | 18 kDa                                                                                                                               |
| <b>Cellular Localization</b> | Mitochondrion membrane                                                                                                               |
| <b>Positive Control</b>      | PC-3M, MCF-7, Hela, HepG2, SW480, NIH/3T3, mouse kidney tissue, human colon cancer tissue, human kidney tissue, mouse testis tissue. |
| <b>Format</b>                | Liquid                                                                                                                               |
| <b>Size</b>                  | 100 µl                                                                                                                               |
| <b>Buffer</b>                | 1×TBS (pH7.4), 1% BSA, 40% Glycerol.                                                                                                 |

|                     |                                                                                                    |
|---------------------|----------------------------------------------------------------------------------------------------|
| <b>Preservative</b> | 0.05% Sodium Azide                                                                                 |
| <b>Storage</b>      | Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. |

## BACKGROUND

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| <b>Introduction</b> | <p>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 perfluorodecanoic 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 (4'-chlorodiazepam) and PK 11185 (an isoquinoline carboxamide derivative), but not clonazepam, and PBR regulates the cholesterol transport that results in decreased circulating corticosterone levels.</p> |
| <b>Keywords</b>     | <p>Benzodiazapine receptor (peripheral);Benzodiazepine peripheral binding site;BPBS;BZRP;DBI;IBP;Isoquinoline carboxamide-binding protein;MBR;mDRC;Mitochondrial benzodiazepine receptor;PBR;PBS;Peripheral benzodiazepine receptor;Peripheral benzodiazepine receptor-related protein;Peripheral type benzodiazepine receptor;Peripheral-type benzodiazepine receptor;pk18;PKBS;PTBR;Ptbr;PTBZR02;RATPTBZR02;translocator protein (18kDa);Translocator protein;Tspo;Tspo1;TSPOA_HUMAN antibody</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |