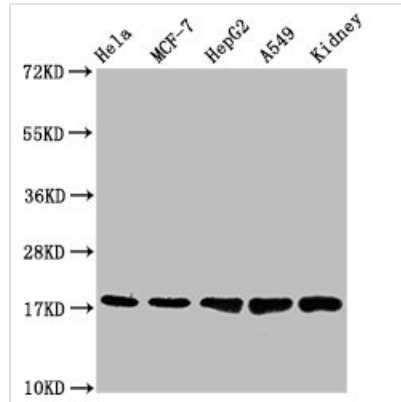




TSPO Antibody

Product Code	CSB-RA025168A0HU
Abbreviation	Translocator protein
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P30536
Immunogen	A synthesized peptide derived from human TSPO
Species Reactivity	Human, Mouse
Tested Applications	ELISA, WB, IHC, IF, FC, IP; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200, IP:1:200-1:1000
Relevance	Can bind protoporphyrin IX and may play a role in the transport of porphyrins and heme (By similarity). Promotes the transport of cholesterol across mitochondrial membranes and may play a role in lipid metabolism (PubMed:24814875), but its precise physiological role is controversial. It is apparently not required for steroid hormone biosynthesis. Was initially identified as peripheral-type benzodiazepine receptor; can also bind isoquinoline carboxamides (PubMed:1847678).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Translocator protein, Mitochondrial benzodiazepine receptor, PKBS, Peripheral-type benzodiazepine receptor, PBR, TSPO, BZRP, MBR
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular
Gene Names	TSPO
Accession NO.	23G2

Image


Western Blot

Positive WB detected in: HeLa whole cell lysate, MCF-7 whole cell lysate, HepG2 whole cell lysate, A549 whole cell lysate, Mouse kidney tissue

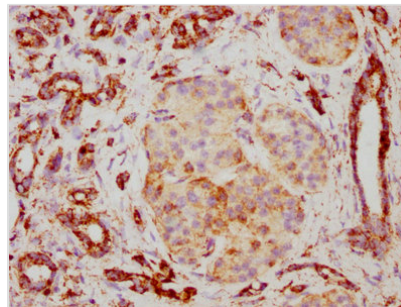
All lanes: PBR antibody at 1.2 μ g/ml

Secondary

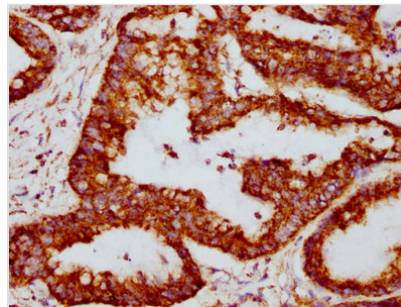
Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 19, 11 KDa

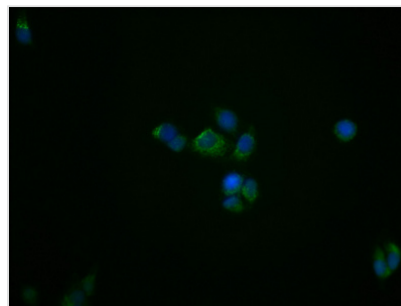
Observed band size: 19 KDa



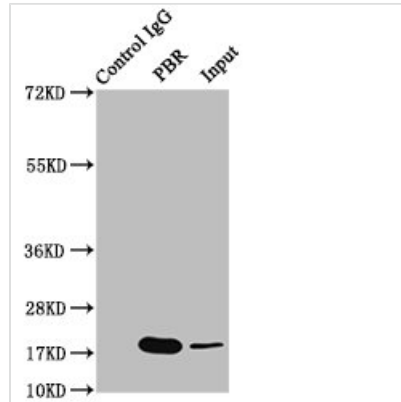
IHC image of CSB-RA025168A0HU diluted at 1:117 and staining in paraffin-embedded human pancreatic cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



IHC image of CSB-RA025168A0HU diluted at 1:117 and staining in paraffin-embedded human colon cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of PC3 cells with CSB-RA025168A0HU at 1:39, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

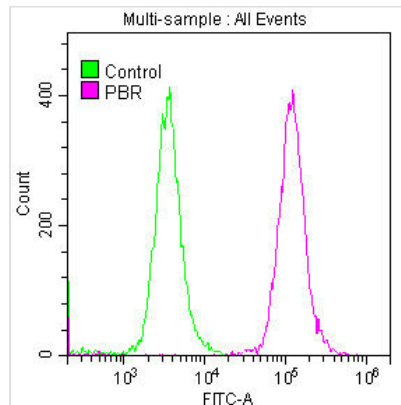


Immunoprecipitating PTGS2 in HeLa whole cell lysate

Lane 1: Rabbit control IgG instead of CSB-RA025168A0HU in HeLa whole cell lysate. For western blotting, a HRP-conjugated Protein G antibody was used as the secondary antibody (1/2000)

Lane 2: CSB-RA025168A0HU (3 μ g) + HeLa whole cell lysate (500 μ g)

Lane 3: HeLa whole cell lysate (20 μ g)



Overlay histogram showing HepG2 cells stained with CSB-RA025168A0HU (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then permeabilized with 0.3% Triton X-100 for 2 min. The cells were then incubated in 1x PBS /10% normal goat serum to block non-specific protein-protein interactions followed by primary antibody for 1 h at 4°C. The secondary antibody used was FITC goat anti-rabbit IgG (H+L) at 1/200 dilution for 1 h at 4°C. Control antibody (green line) was used under the same conditions. Acquisition of >10,000 events was performed.

Description

CUSABIO clones the DNA sequence encoding human TSPO protein into the expression vector and then transfects the clones into the cell line for in vitro production to get the TSPO recombinant monoclonal antibody. This TSPO antibody has undergone Affinity-chromatography purification. It can react with the TSPO protein from human and mouse species and has been validated in ELISA, WB, IHC, IF, FC, and IP applications.

TSPO is abundantly expressed throughout the body including the central nervous system (CNS). TSPO is upregulated in states of inflammation and brain injury due to microglia activation. Due to its location in the outer mitochondrial membrane, TSPO has been involved in multiple biological processes, including the regulation of proliferation, apoptosis, migration, as well as mitochondrial functions. TSPO is frequently overexpressed in glioblastoma (GBM). Its expression level has been positively correlated to WHO grade, glioma cell proliferation, and poor prognosis of patients.