

TSPO2 (C-14): sc-167243

BACKGROUND

TSPO2 (translocator protein 2), also known as peripheral-type benzodiazepine receptor-like protein 1 or BZRPL1, is a 170 amino acid multi-pass membrane protein of the endoplasmic reticulum that belongs to the TspO/BZRP family. TSPO2 contains a C-terminal region that binds cholesterol and redistributes it during erythropoiesis, and may therefore influence erythrocyte maturation. Existing as two alternatively spliced isoforms, TSPO2 is encoded by a gene that maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, maple syrup urine disease, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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3. Edelmann, L., et al. 2001. Maple syrup urine disease: identification and carrier-frequency determination of a novel founder mutation in the Ashkenazi Jewish population. *Am. J. Hum. Genet.* 69: 863-868.
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6. Fan, J., et al. 2009. Translocator protein 2 is involved in cholesterol redistribution during erythropoiesis. *J. Biol. Chem.* 284: 30484-30497.
7. Fan, J., et al. 2010. Linkage disequilibrium mapping of the chromosome 6q21-22.31 bipolar I disorder susceptibility locus. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 153B: 29-37.
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CHROMOSOMAL LOCATION

Genetic locus: TSPO2 (human) mapping to 6p21.1.

SOURCE

TSPO2 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TSPO2 of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167243 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSPO2 (C-14) is recommended for detection of TSPO2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TSPO2 siRNA (h): sc-95158, TSPO2 shRNA Plasmid (h): sc-95158-SH and TSPO2 shRNA (h) Lentiviral Particles: sc-95158-V.

Molecular Weight of TSPO2 isoforms: 19/8 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.