

BOCT (P-12): sc-138148

BACKGROUND

BOCT (brain-type organic cation transporter), also known as solute carrier family 22 member 17, is a 538 amino acid protein that belongs to the major facilitator superfamily as well as the organic cation transporter family. BOCT is considered a multi-pass membrane protein and is highly conserved. BOCT is expressed in brain and is abundantly expressed in erythroid cells. Known to be a receptor for NGAL, BOCT transports iron-lacking LCN2 into cells. BOCT exists as two alternatively spliced isoforms and its expression is suppressed by c-Abl oncoprotein. The BOCT gene maps to chromosome 14q11.2. Chromosome 14 contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA. Chromosome 14 encodes the pre-senilin 1 (PSEN1) gene, which is one of the three key genes associated with the development of Alzheimer's disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC22A17 (human) mapping to 14q11.2; Slc22a17 (mouse) mapping to 14 C3.

SOURCE

BOCT (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BOCT of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures

PRODUCT

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

Blocking peptide available for competition studies, sc-138148 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BOCT (P-12) is recommended for detection of BOCT isoforms 1 and 2 of mouse, rat and 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).

BOCT (P-12) is also recommended for detection of BOCT isoforms 1 and 2 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for BOCT siRNA (h): sc-92100, BOCT siRNA (m): sc-141722, BOCT shRNA Plasmid (h): sc-92100-SH, BOCT shRNA Plasmid (m): sc-141722-SH, BOCT shRNA (h) Lentiviral Particles: sc-92100-V and BOCT shRNA (m) Lentiviral Particles: sc-141722-V.

Molecular Weight of BOCT: 58 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.