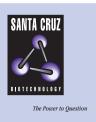
SANTA CRUZ BIOTECHNOLOGY, INC.

BTR1 (H-300): sc-67398



BACKGROUND

BTR1 (bicarbonate transporter-related protein 1), also known as sodium bicarbonate transporter-like protein 11, sodium-coupled borate cotransporter 1 (NaBC1) or solute carrier family 4 member 11 (SLC4A11), belongs to the anion exchanger family of proteins. BTR1 is ubiquitously expressed, localizes to the plasma membrane and exists as a multi-pass membrane protein. It functions as an electrogenic Na⁺-dependent borate transporter and is essential for cell growth, proliferation and borate homeostasis. In the absence of borate, BTR1 functions as a conductive transporter, permeable to Na⁺ and H⁺. Several different mutations in BTR1 result in recessive congenital hereditary endothelial dystrophy (CHED2), a rare eye disorder characterized by corneal opacification and involuntary eye movement (nystagmus).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC4A11 (human) mapping to 20p12; Slc4a11 (mouse) mapping to 2 F1.

SOURCE

BTR1 (H-300) is a rabbit polyclonal antibody raised against amino acids 51-350 mapping near the N-terminus of BTR1 of human origin.

PRODUCT

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

APPLICATIONS

BTR1 (H-300) is recommended for detection of BTR1 of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation $[1-2 \ \mu g \ per 100-500 \ \mu g \ of total \ protein (1 \ ml \ of cell \ lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).$

Suitable for use as control antibody for BTR1 siRNA (h): sc-62026 and BTR1 siRNA (m): sc-62027.

Molecular Weight of BTR1: 100 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

RESEARCH USE

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

PROTOCOLS

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