

Bestrophin-3 (D-15): sc-70144

BACKGROUND

Bestrophin-3, also known as BEST3 or VMD2L3 (vitelliform macular dystrophy 20-like protein 3), is a 668 amino acid member of the Bestrophin family of proteins. Members of the Bestrophin family are transmembrane proteins that contain a high percentage of aromatic residues, a conserved RFP (Arg-Phe-Pro) motif and they function as anion channels. Expressed predominantly in skeletal muscle but also found in spinal cord, brain, testis, thymus, retina and bone marrow, Bestrophin-3 forms calcium-sensitive chloride channels. In addition, Bestrophin-3 contains an AI (auto-inhibitory) domain that is capable of regulating the anion channel activity. Due to alternative splicing events, three isoforms exist for Bestrophin-3.

REFERENCES

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5. Duta, V., Szkotak, A.J., Nahirney, D. and Duszyk, M. 2004. The role of Bestrophin in airway epithelial ion transport. *FEBS Lett.* 577: 551-554.
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CHROMOSOMAL LOCATION

Genetic locus: BEST3 (human) mapping to 12q15; Best3 (mouse) mapping to 10 D2.

SOURCE

Bestrophin-3 (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of Bestrophin-3 of human origin.

STORAGE

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

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, ready P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Bestrophin-3 (D-15) is recommended for detection of Bestrophin-3 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).

Bestrophin-3 (D-15) is also recommended for detection of Bestrophin-3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Bestrophin-3 siRNA (h): sc-72641, Bestrophin-3 siRNA (m): sc-72642, Bestrophin-3 shRNA Plasmid (h): sc-72641-SH, Bestrophin-3 shRNA Plasmid (m): sc-72642-SH, Bestrophin-3 shRNA (h) Lentiviral Particles: sc-72641-V and Bestrophin-3 shRNA (m) Lentiviral Particles: sc-72642-V.

Molecular Weight of Bestrophin-3: 47 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.

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.