



Bestrophin-2 (m): 293T Lysate: sc-118796

BACKGROUND

Bestrophin-2, also known as BEST2 or VMD2L1 (vitelliform macular dystrophy 2-like protein 1), is a 509 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. Bestrophin-2 forms a calcium-sensitive chloride channel located within the cell membrane. It is also believed that Bestrophin-2 channels may also conduct other physiological anions such as bicarbonate. Bestrophin-2 is mainly expressed in retinal pigment epithelium and colon.

REFERENCES

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3. Tsunenari, T., Sun, H., Williams, J., Cahill, H., Smallwood, P., Yau, K.W. and Nathans, J. 2003. Structure-function analysis of the bestrophin family of anion channels. *J. Biol. Chem.* 278: 41114-41125.
4. Qu, Z., Fischmeister, R. and Hartzell, C. 2004. Mouse bestrophin-2 is a bona fide Cl⁻ channel: identification of a residue important in anion binding and conduction. *J. Gen. Physiol.* 123: 327-340.
5. Qu, Z. and Hartzell, C. 2004. Determinants of anion permeation in the second transmembrane domain of the mouse bestrophin-2 chloride channel. *J. Gen. Physiol.* 124: 371-382.
6. Qu, Z., Chien, L.T., Cui, Y. and Hartzell, H.C. 2006. The anion-selective pore of the bestrophins, a family of chloride channels associated with retinal degeneration. *J. Neurosci.* 26: 5411-5419.
7. Pifferi, S., Pascarella, G., Boccaccio, A., Mazzatenta, A., Gustincich, S., Menini, A. and Zucchielli, S. 2006. Bestrophin-2 is a candidate calcium-activated chloride channel involved in olfactory transduction. *Proc. Natl. Acad. Sci. USA* 103: 12929-12934.

CHROMOSOMAL LOCATION

Genetic locus: Best2 (mouse) mapping to 8 C3.

PRODUCT

Bestrophin-2 (m): 293T Lysate represents a lysate of mouse Bestrophin-2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

Bestrophin-2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Bestrophin-2 antibodies. Recommended use: 10-20 µl per lane.

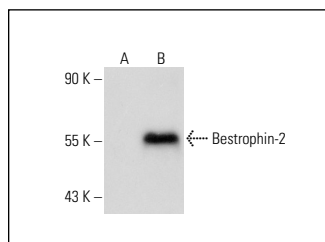
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Bestrophin-2 (B-5): sc-376660 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Bestrophin-2 expression in Bestrophin-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

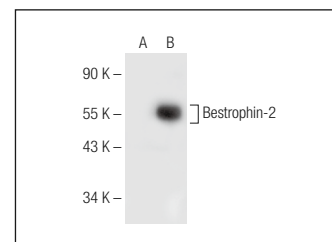
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Bestrophin-2 (B-5): sc-376660. Western blot analysis of Bestrophin-2 expression in non-transfected: sc-117752 (A) and mouse Bestrophin-2 transfected: sc-118796 (B) 293T whole cell lysates.



Bestrophin-2 (D-7): sc-376351. Western blot analysis of Bestrophin-2 expression in non-transfected: sc-117752 (A) and mouse Bestrophin-2 transfected: sc-118796 (B) 293T whole cell lysates.

PROTOCOLS

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