

BVES (H-300): sc-134807

BACKGROUND

Blood vessel epicardial substance (BVES), also designated Popeye protein 1, is a transmembrane protein that plays a role in cell-cell interactions and adhesion, specifically at tight junctions. BVES is composed of an extracellular amino terminus, three transmembrane domains and a cytoplasmic carboxyl terminus. It is expressed in the developing coronary vascular system, specifically in the proepicardium, migrating epithelial epicardium, delaminated vasculogenic mesenchyme and vascular smooth muscle cells, where it functions to direct development in heart, epithelial and muscle cells during embryogenesis. BVES accumulates at points of cell/cell contact, such as filopodia and cell borders, and promotes adhesion prior to the arrival of E-cadherin. It also regulates epithelial integrity during cell movement and growth.

REFERENCES

1. Reese, D.E., et al. 1999. *bves*: A novel gene expressed during coronary blood vessel development. *Dev. Biol.* 209: 159-171.
2. Wada, A.M., et al. 2001. *Bves*: prototype of a new class of cell adhesion molecules expressed during coronary artery development. *Development* 128: 2085-2093.

CHROMOSOMAL LOCATION

Genetic locus: BVES (human) mapping to 6q21; *Bves* (mouse) mapping to 10 B2.

SOURCE

BVES (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of BVES of human origin.

PRODUCT

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

APPLICATIONS

BVES (H-300) is recommended for detection of BVES of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

BVES (H-300) is also recommended for detection of BVES in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for BVES siRNA (h): sc-60295, BVES siRNA (m): sc-60296, BVES shRNA Plasmid (h): sc-60295-SH, BVES shRNA Plasmid (m): sc-60296-SH, BVES shRNA Plasmid (h): sc-60295-SH and BVES shRNA (m) Lentiviral Particles: sc-60296-V.

Molecular Weight of BVES: 41 kDa.

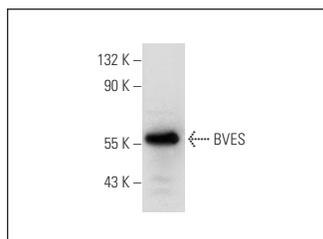
Molecular Weight of BVES: 58-80 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409 or PC-12 cell lysate: sc-2250.

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.

DATA



BVES (H-300): sc-134807. Western blot analysis of BVES expression in PC-12 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Alcalay, Y., et al. 2013. Popeye domain containing 1 (Popdc1/Bves) is a caveolae-associated protein involved in ischemia tolerance. *PLoS One* 8: e71100.

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.



Try **BVES (E-3): sc-374081** or **BVES (H-4): sc-374082**, our highly recommended monoclonal alternatives to BVES (H-300).