

BLVRB (G-18): sc-54575

BACKGROUND

BLVRB (biliverdin reductase B or BVR-B), also known as flavin reductase (FR), NADPH-dependent diaphorase, biliverdin-IX β -reductase or Green heme-binding protein (GHBP) is an enzyme involved in fetal heme metabolism. It is dependent on NADPH and is responsible for catalyzing the transfer of electrons to flavins from reduced pyridine nucleotides. BLVRB exists as a monomer, localizes to the cytoplasm and is highly expressed in fetal liver and adult erythrocytes and, to a lesser extent, in heart, lung, cerebrum and adrenal gland. In liver, BLVRB functions to convert biliverdin (isoforms IX β , IX γ and IX δ) to bilirubin. BLVRB contains one binding site for all of its substrates and predominantly interacts with them through hydrophobic interactions. BLVRB also exhibits ferric reductase activity. In addition, it is commonly used as a reliable marker for NOS.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BLVRB (human) mapping to 19q13.2; Blvrb (mouse) mapping to 7 A3.

SOURCE

BLVRB (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BLVRB of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-54575 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BLVRB (G-18) is recommended for detection of BLVRB 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).

BLVRB (G-18) is also recommended for detection of BLVRB in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BLVRB siRNA (h): sc-62021, BLVRB siRNA (m): sc-62022, BLVRB shRNA Plasmid (h): sc-62021-SH, BLVRB shRNA Plasmid (m): sc-62022-SH, BLVRB shRNA (h) Lentiviral Particles: sc-62021-V and BLVRB shRNA (m) Lentiviral Particles: sc-62022-V.

Molecular Weight of BLVRB: 21 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.

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.