

BLVRB (FL-206): sc-135067

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. BLVRB is dependent on NADPH and is responsible for catalyzing the transfer of electrons to flavins from reduced pyridine nucleotides. It 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

1. Shalloe, F., et al. 1996. Evidence that biliverdin-IX β reductase and flavin reductase are identical. *Biochem. J.* 316: 385-387.
2. Komuro, A., et al. 1997. Molecular cloning and expression of human liver biliverdin-IX β reductase. *Biol. Pharm. Bull.* 19: 796-804.

CHROMOSOMAL LOCATION

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

SOURCE

BLVRB (FL-206) is a rabbit polyclonal antibody raised against amino acids 1-206 representing full length BLVRB 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.

APPLICATIONS

BLVRB (FL-206) 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), immunoprecipitation [1-2 μ g per 100-500 μ 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).

BLVRB (FL-206) 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.

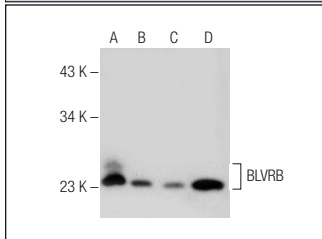
Molecular Weight of BLVRB: 21 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

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



BLVRB (FL-206): sc-135067. Western blot analysis of BLVRB expression in U266 (A), Caco-2 (B), Hep G2 (C) and HeLa (D) whole cell lysates.

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 **BLVRB (B-9): sc-373692**, our highly recommended monoclonal alternative to BLVRB (FL-206).