

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Biliverdin Reductase B/BLVRB in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Biliverdin Reductase B/BLVRB Ala2-Gln206, predicted Accession # P30043
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Clearance of heme in mammals is a two-step process starting with conversion of heme to biliverdin by heme oxygenase, followed by reduction of biliverdin to bilirubin by biliverdin reductase. Biliverdin IX b reductase (BLVRB) converts the β isomer of biliverdin IX to bilirubin IX b, which constitutes 87% of total bilirubin in fetal bile. Therefore BLVRB is especially important for fetal heme metabolism and clearance (1). BLVRB is a cytoplasmic enzyme expressed at high levels in erythrocytes and liver, but is present in other tissues (2). The enzyme is identical to flavin reductase, which is an oxidoreductase that catalyzes the NADPH-dependent reduction for a variety of flavins, such as riboflavin, FAD or FMN and met-hemoglobin (3, 4). BLVRB is structurally distinct from BLVRA. In contrast to BLVRA, which prefers the biliverdin α isomer but could also use the β isomer as substrate, BLVRB is specific for the β isomer (5, 6).

PRODUCT SPECIFIC NOTICES

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