

## Anti-BLVRB Antibody (2Y112)

### Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	2Y112
Purification:	Protein A

### Applications

1. Anti-BLVRB rabbit monoclonal antibody at 1:500 dilution.

-Lane A: Hela Whole Cell Lysate.

-Lane B: HepG2 Whole Cell Lysate.

-Lane C: K562 Whole Cell lysate.

-Lysates/proteins at 30 µg per lane.

-Secondary

-Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution.

-Developed using the Odyssey technique.

-Performed under reducing conditions.

-Predicted band size:22 kDa.

-Observed band size:22 kDa.

2. BLVRB was immunoprecipitated using:

-Lane A:0.5 mg Hela Whole Cell Lysate.

-Lane B:0.5 mg HepG2 Whole Cell Lysate.

-Lane C:0.5 mg K562 Whole Cell Lysate.

-Lane D:0.5 mg Caco-2 Whole Cell Lysate.

-2 µL anti-BLVRB rabbit monoclonal antibody and 15 µL of 50 % Protein G agarose.

-Primary antibody:

-Anti-BLVRB rabbit monoclonal antibody, at 1:100 dilution.

-Secondary antibody:

-Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution.

-Developed using the odyssey technique.

-Performed under reducing conditions.

-Predicted band size: 22 kDa.

-Observed band size: 22 kDa

Verified Activity:

Application: ELISA,IP,WB

Recommended WB: 1:500-1:2000; ELISA: 1:5000-1:10000; IP: 1-4 µL/mg of lysate

### Properties

**Stability & Storage:** Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.

**Shipping:** Shipping with blue ice.

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### Antigen Details

**Immunogen:** Recombinant Protein: Human BLVRB / biliverdin reductase B protein (TMPY-02519)

**Antigen Species:** Human

**Synonyms:** SDR43U1;HEL-S-10;FLR;biliverdin reductase B;BVRB

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### Research Background

Biliverdin reductase (hBVR) is a serine/threonine kinase that catalyzes reduction of the heme oxygenase (HO) activity product, biliverdin, to bilirubin. BVR consists of an N-terminal dinucleotide-binding domain (Rossmann-fold) and a C-terminal domain that contains a six-stranded  $\beta$ -sheet that is flanked on one face by several  $\alpha$ -helices. The C-terminal and N-terminal domains interact extensively, forming the active site cleft at their interface. Biliverdin reductase (BVR) catalyzes the last step in heme degradation by reducing the  $\gamma$ -methene bridge of the open tetrapyrrole, biliverdin IX $\alpha$ , to bilirubin with the concomitant oxidation of a  $\beta$ -nicotinamide adenine dinucleotide (NADH) or  $\beta$ -nicotinamide adenine dinucleotide phosphate (NADPH) cofactor. It is now recognized that human BVR (hBVR) is a dual-specificity kinase (Ser / Thr and Tyr) upstream activator of the insulin/insulin growth factor-1 (IGF-1) and mitogen-activated protein kinase (MAPK) signaling pathways. Human BVR (hBVR) is essential for MAPK-extracellular signal-regulated kinase (ERK)1/2 (MEK)-eukaryotic-like protein kinase (Elk) signaling and has been identified as the cytoplasm-nuclear heme transporter of ERK1/2 and hematin, the key components of stress-responsive gene expression.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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