83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone: +1.6268339877 Email: info@cali-bio.com

Product Datasheet

Product Name Biliverdin Reductase B Human Recombinant

Cata No CB501096

Source Escherichia Coli.

Synonyms FLR, BVRB, SDR43U1, MGC117413, BLVRB, Flavin reductase, FR,

NADPH-dependent diaphorase, NADPH-flavin reductase, Biliverdin reductase B,

BVR-B, Biliverdin-IX beta-reductase, Green heme-binding protein, GHBP.

Description

BLVRB (EC 1.3.1.24) catalyzes electron transfer from reduced pyridine nucleotides to flavins as well as methylene blue, pyrroloquinoline quinone, riboflavin, or methemoglobin. BLVRB is involved in protecting cells from oxidative damage or in regulating iron metabolism. BLVRB converts biliverdin to bilirubin in the liver, converting a double-bond between the second and third pyrrole ring into a single-bond. BLVRB plays a role as in human erythrocytic heme catabolic pathway and most mammalian species. Biliverdin reductase is abundantly expressed in kidney, spleen, liver and brain as well as at lower levels in the thymus and minimal levels being detected in testis.

BLVRB Human Recombinant amino produced in E.Coli is a single, non-glycosylated polypeptide chain containing 206 amino acids having a molecular mass of 22.1 kDa.

The BLVRB is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered colorless solution.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Formulation

The protein contains 20mM Tris-HCl buffer pH 8.5, 10% glycerol, and 1mM DTT.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Avoid multiple freeze-thaw cycles.

Sequence

MAVKKIAIFG ATGQTGLTTL AQAVQAGYEV
TVLVRDSSRL PSEGPRPAHV VVGDVLQAAD
VDKTVAGQDA VIVLLGTRND LSPTTVMSEG
ARNIVAAMKA HGVDKVVACT SAFLLWDPTK
VPPRLQAVTD DHIRMHKVLR ESGLKYVAVM
PPHIGDQPLT GAYTVTLDGR GPSRVISKHD
LGHFMLRCLT TDEYDGHSTY PSHQYQ