

# Biliverdin reductase A, 3-296 aa

## Human, Recombinant, *E.coli*

## Cat. No. ATGP0377

Full name: Biliverdin reductase A

NCBI Accession No.: NP\_000703

Synonyms: BLVR, BVR, BVRA

**Description:** BLVRA, also known as biliverdin reductase A, belongs to the gfo/idh/mocA family. This protein is an enzyme that converts biliverdin to bilirubin, converting a double-bond between the second and third pyrrole ring into a single-bond. (Bilirubin + NAD (P) + = biliverdin + NAD (P) H) Recombinant BLVRA protein was expressed in *E.coli* and purified by using conventional chromatography techniques.

Form: Liquid. In 20mM Tris-HCI buffer (pH8.0) containing 10% glycerol	
Molecular Weight: 33.3 kDa (295aa), confirmed by MALDI-TOF	(kDa)
(Molecular weight on SDS-PAGE will shift up)	57
Purity: > 90% by SDS - PAGE	40 28
Concentration: 1 mg/ml (determined by Bradford assay)	18
<b>Endotoxin Level:</b> < 1.0 EU per 1 $\mu$ g of protein (determined by LAL method)	13.5 8.5
Biological activity: Specific activity is > 450 pmol/min/ug, and is defined as the amount	15% SDS-PAGE (3ug)
of enzyme that catalyze the reduction 1.0 pmole of biliverdin of NADPH per minute at	
pH 8.8 at 25C.	

#### Sequences of aminoacids:

MAEPERKFGV VVVGVGRAGS VRMRDLRNPH PSSAFLNLIG FVSRRELGSI DGVQQISLED ALSSQEVEVA YICSESSSHE DYIRQFLNAG KHVLVEYPMT LSLAAAQELW ELAEQKGKVL HEEHVELLME EFAFLKKEVV GKDLLKGSLL FTAGPLEEER FGFPAFSGIS RLTWLVSLFG ELSLVSATLE ERKEDQYMKM TVCLETEKKS PLSWIEEKGP GLKRNRYLSF HFKSGSLENV PNVGVNKNIF LKDQNIFVQK LLGQFSEKEL AAEKKRILHC LGLAEEIQKY CCSRK

#### **General references:**

Kravets A., et al. (2004) J Biol Chem. 279(19):19916-23.

Franklin E., et al. (2007) Biochem J. 405(1):61-7.

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

Warning

For research use only. This product is not intended or approved for human, diagnostics or veterinary use