



# Recombinant Bovine NADH-cytochrome b5 reductase 3 (CYB5R3)

<b>Product Code</b>	CSB-EP006320BO-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P07514
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Bos taurus (Bovine)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	GAQLSTLGH VVLSPVWFLY SLIMKLFQRS TPAITLENPD IKYPLRLIDK EVISHDTRRF RFALPSPEHI LGLPVGQHIY LSARIDGNLV IRPYTPVSSD DDKGFVDLVI KVFYKDTHPK FPAGGKMSQY LESMKIGDTI EFRGPNGLLV YQGKGFKAIR PDKKSDPVIK TVKSVGMIAG GTGITPMLQV IRAIMKDPDD HTVCHLLFAN QTEKDILLRP ELEELRNEHS ARFKLWYTVD KAPEAWDYSQ GFVNEEMIRD HLPPPEEEPL VLMCGPPPMI QYAACLPLNDR VGHPKERCFA F
<b>Source</b>	E.coli
<b>Target Names</b>	CYB5R3
<b>Protein Names</b>	Recommended name: NADH-cytochrome b5 reductase 3 Short name= B5R Short name= Cytochrome b5 reductase EC= 1.6.2.2 Alternative name(s): Diaphorase-1 Cleaved into the following 2 chains: 1. NADH-cytochrome b5 reductase 3 memb
<b>Expression Region</b>	2-301
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	This gene encodes cytochrome b5 reductase, which includes a membrane-bound form in somatic cells (anchored in the endoplasmic reticulum, mitochondrial and other membranes) and a soluble form in erythrocytes. The membrane-bound form exists mainly on the cytoplasmic side of the endoplasmic reticulum and functions in desaturation and elongation of fatty acids, in cholesterol biosynthesis, and in drug metabolism. The erythrocyte form is located in a soluble fraction of circulating erythrocytes and is involved in methemoglobin reduction. The membrane-bound form has both membrane-binding and catalytic domains, while the soluble form has only the catalytic domain. These two forms are resulted from alternative splicing of the gene. Mutations in this gene cause methemoglobinemias.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final



concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.