

Product: Disulfide Oxidoreductase (DsbA), recombinant
Catalog #: 12-4322
Amount: 25 µg

DESCRIPTION: Recombinant Disulfide Oxidoreductase (rDsbA)
rDsbA produced in E.Coli is a periplasmic protein isolated from E. coli having a molecular mass of 23,149 Dalton.
DsbA appears to be necessary for correct formulation of disulfide bonds in exported proteins *in vivo*. DsbA is useful as a standard in immunoblotting. This protein catalyses the reduction and exchange of disulfide bonds and the oxidation of free sulfhydryl groups *in vitro*. It is the strongest oxidant of the thioredoxin superfamily. This thio/disulfide oxidoreductase is required for efficient disulfide bond formation in the periplasm of E. coli.
The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ly-Lys-Ala-Trp.

SOURCE: *Escherichia coli* expression system

PURITY: > 95%, as determined by:
(a) Analysis by RP-HPLC and anion-exchange FPLC
(b) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel

ENDOTOXIN: Less than 0.1 ng/µg (IEU/µg) of rDsbA

DIMERS & AGGREGATES: Less than 1% as determined by silver stained SDS-PAGE gel analysis

PROTEIN CONTENT: Protein quantitation was carried out by two independent methods:
1. UV spectroscopy at 280 nm.
2. Analysis by RP-HPLC, using a standard solution of DsbA as a Reference Standard.

APPLICATION: Suitable for use in Western Blot. If this protein is to be used for Western Blot analysis, we recommend that the material be diluted in 1X SDS-PAGE sample buffer (1). On a 15-well minigel system, 50ng of protein per lane should be sufficient when used in a colorimetric Western Blot with D9625 at a dilution of 1:10,000 as the primary antibody and an appropriate alkaline phosphatase conjugated secondary antibody for detection.

FORM: Purified, in 50mM sodium phosphate buffer and 100mM sodium chloride, containing 0.1% BSA

STORAGE: -20°C (aliquot), avoid freezing and thawing cycles

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