



Product Datasheet

Product Name	Disulfide Oxidoreductase Recombinant
Cata No	CB500455
Source	<i>Escherichia Coli.</i>
Synonyms	DsbA, Thiol:disulfide interchange protein dsbA.

Description

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*.

Disulfide Oxidoreductase produced in *E. coli* is a periplasmic protein isolated from *E. coli*, containing 208 amino acids having a molecular mass of 23,149 Dalton.

The DsbA is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The protein was lyophilized after from a sterile solution containing 50mM sodium phosphate buffer and 100mM sodium chloride.

Stability

Lyophilized DsbA although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution DsbA should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ly-Lys-Ala-Trp.

Applications

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.

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