

SEPX1, 1-116aa, Human, His tag, E.coli

Cat.NO.: TP03893

3th Edition

Synonyms:Methionine-R-sulfoxide reductase B1, Selenoprotein X, HSPC270, MSRB1, SELR, SELX, MSRB1

Description:SEPX1, also known as Methionine sulfoxide reductase B1 (MSRB1), is a selenoprotein. Methionine sulfoxide reductases(MSRs) catalyze reduction of free and protein-bound methionine sulfoxides to corresponding methionines. The oxidation of methionine by ROS generates a diastereomeric mixture of methionine-S-sulfoxide (Met-S-SO) and methionine-R-sulfoxide (Met-R-SO). Two distinct enzyme families evolved for reduction of these sulfoxides, with methionine-S-sulfoxide reductase (MsrA) being stereospecific for Met-S-SO and methionine-R-sulfoxide reductase (MsrB) for Met-R-SO. In bacteria, the selenocysteine (Sec/U) element is located immediately following the UGA codon within the reading frame for the selenoprotein so we mutated Sec-95 to Cys. Recombinant human SEPX1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.

Form:Liquid. In 20 mM Tris-HCl Buffer (pH 7.5) containing 1 mM DTT, 0.1 mM PMSF, 2mM EDTA, 10% Glycerol

Molecular Weight:14.8 kDa(136aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMSFCFFGGGEVFNHFEFPGVYVCAKCGYELFSSRSKYAHSSPWPAFTETIHADS
VAKRPEHNRSEALKVSCGKCGNGLGHEFLNDGPKPGQSRFCIFSSSLKFVPKGKETSASQGH

Purity:> 95% by HPLC

Concentration:0.5mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

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.