## 32-4803: Recombinant Human Selenoprotein X 1

**Alternative Name :** Methionine-R-sulfoxide reductase B1,MsrB1,Selenoprotein X,SelX,SEPX1,SELR,SELX,HSPC270,MGC3344.

## Description

Source : Escherichia Coli. SEPX1 Human Recombinant fused with a 20 amino acid His tag at N-terminus produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 136 amino acids (1-116 a.a.) and having a molecular mass of 14.8kDa. In bacteria, the selenocystein (Sec/U) element is positioned directly following the UGA codon within the reading frame for the selenoprotein so we mutated Sec-95 to Cys. The SEPX1 is purified by proprietary chromatographic techniques. Methionine sulfoxide reductase B1 (SEPX1 or MSRB1), is a selenoprotein that contains a selenocysteine (Sec) residue at its active site. The selenocysteine is encoded by the UGA codon that usually signals translation termination. SEPX1 is a member of the methionine sulfoxide reductase B (MsrB) family, and is expressed in an assortment of adult and fetal tissues. MSRs (Methionine sulfoxide reductases) catalyze the reduction of free and protein-bound methionine sulfoxides to corresponding methionines. The oxidation of methionine by ROS creates a diastereomeric mixture of methionine-S-sulfoxide (Met-S-SO) and methionine-R-sulfoxide (Met-R-SO). Two separate 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.

## Product Info

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| **Amount :** | 10 µg |
| **Purification :** | Greater than 90.0% as determined by SDS-PAGE. |
| **Content :** | The SEPX1 solution (0.5 mg/ml) contains 20mM Tris-HCl Buffer (pH 7.5), 1mM DTT, 0.1mM PMSF, 2mM EDTA and 10% Glycerol. |
| **Storage condition :** | Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles. |
| **Amino Acid :** | MGSSHHHHHH SSGLVPRGSH MSFCSFFGGE VFQNHFEPGV YVCAKCGYEL FSSRSKYAHS SPWPAFTETI HADSVAKRPE HNRSEALKVS CGKCGNGLGH EFLNDGPKPG QSRFCIFSSS LKFVPKGKET SASQGH. |