

Product datasheet for **TP762572**

Methionine Sulfoxide Reductase B (MSRB1) (NM_016332) Human Recombinant Protein

Product data:

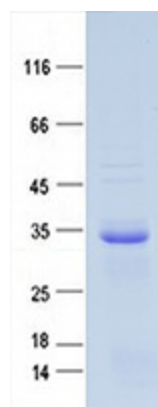
Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human selenoprotein X, 1 (SEPX1), (Note, selenocysteine protein, internal stop codon, see reference data summary), 50ug
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	A DNA sequence encoding the region full length of MSRB1
Tag:	N-GST and C-HIS
Predicted MW:	12.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	50mM Tris, pH8.0, 8M Urea
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for at least 1 year from receipt of products under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_057416
Locus ID:	51734
UniProt ID:	Q9NZV6
RefSeq Size:	1386
Cytogenetics:	16p13.3
Synonyms:	HSPC270; SELENOR; SELENOX; SELR; SELX; SepR; SEPX1



[View online »](#)

Summary:

The protein encoded by this gene belongs to the methionine-R-sulfoxide reductase B (MsrB) family. Members of this family function as repair enzymes that protect proteins from oxidative stress by catalyzing the reduction of methionine-R-sulfoxides to methionines. This protein is highly expressed in liver and kidney, and is localized to the nucleus and cytosol. It is the only member of the MsrB family that is a selenoprotein, containing a selenocysteine (Sec) residue at its active site. It also has the highest methionine-R-sulfoxide reductase activity compared to other members containing cysteine in place of Sec. Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon, rather than as a stop signal. A pseudogene of this locus has been identified on chromosome 19. [provided by RefSeq, Aug 2017]

Product images:

Coomassie blue staining of purified MSRB1 protein (Cat #TP762572). The protein was produced from E.coli.