

AR09673PU-L

Human SEPX1 / MSRB1 (1-116, His-tag) - Purified

Alternate names:

Methionine-R-sulfoxide reductase B1, SelX, Selenoprotein X

Quantity:

0.25 mg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

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 selenocystein (Sec/U) element is located immediately following the UGA codon within the reading frame for the selenoprotein so we mutated Sec-95 to Cys.

Uniprot ID:

[Q9NZV6](#)

NCBI:

[NP_057416](#)

GenelD:

[51734](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >90%

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

Description:

Recombinant human SEPX1 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MSFCSFFGGE VFQNHFEPCV YVCAKCGYEL FSSRSKYAHS
SPWPAFTETI HADSVAKRPE HNRSEALKVS CGKCGNGLGH EFLNDGPKPG QSRFCIFSSS
LKFVPGKGT SASQGH

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

Storage:

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

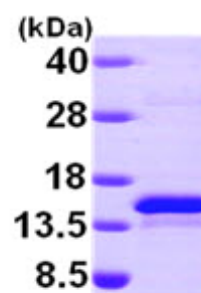
Shelf life: one year from despatch.

General Readings:

Gladdyshev VN., et al. (2010) PLoS One. 5(7):e11497.

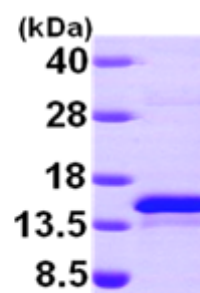
Thiele JJ., et al. (2009) Am J Dermatopathol. 31(5):427-31.

Pictures:



15% SDS-PAGE (3ug)*

Recombinant human SEPX1 (U95C),
1-116aa, His-tagged



15% SDS-PAGE (3ug)