

Recombinant human Selenoprotein W/SELENOW protein

Catalog Number: ATGP4033

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-87aa

UniProt No.

P63302

NCBI Accession No.

NP_003000

Alternative Names

Selenoprotein W, selW, SEPW1, Selenoprotein W1

PRODUCT SPECIFICATION

Molecular Weight

11.8 kDa (110aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by BRADFORD assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.15M NaCl, 20% glycerol, 1mM DTT

Purity

> 95% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

SEPW1 is a selenoprotein, which contains a selenocysteine (Sec) residue at its active site. The selenocysteine is encoded by the uGA codon that normally signals translation termination. The 3' uTR of selenoprotein genes have a common stem-loop structure, the sec insertion sequence (SECIS), that is necessary for the recognition of uGA as a Sec codon rather than as a stop signal. This protein shows highest expression in skeletal muscle and heart, and may be involved in oxidation-reduction reactions. A retroprocessed pseudogene, SEPW1P, has been identified and mapped to chromosome 1p35-34. Recombinant human SEPW1 protein, fused to His-tag at N-

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terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>MALAVRV VYCGACGYKS KYLQLKKKLE DEFPGRDLIC GEGTPQATGF
FEVMVAGKLI HSKKKGDGYV DTESKFLKLV AAIKAALAQG

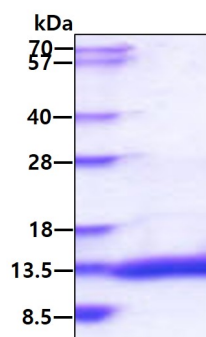
General References

Hawkes,W.C., et al. (2012) J. Biol. Chem. 287 (33), 27371-27379

Hawkes,W.C., et al. (2012) J. Cell. Biochem. 113 (1), 61-69

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.