

# Recombinant Human SEPHS1 Protein (His Tag)

Catalog Number:PKSH033016



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

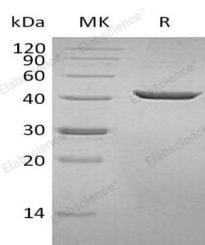
## Description

<b>Synonyms</b>	Selenide;water dikinase 1;Selenium donor protein 1;Selenophosphate synthase 1;SEPHS1;SELD;SPS;SPS1
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Ser392
<b>Accession</b>	P49903
<b>Calculated Molecular Weight</b>	43.9 kDa
<b>Observed molecular weight</b>	42 kDa
<b>Tag</b>	C-His

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
<b>Storage</b>	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
<b>Shipping</b>	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
<b>Formulation</b>	Supplied as a 0.2 $\mu$ m filtered solution of 25mM Tris-HCl, 100mM glycine, 10% Glycerol, pH 7.3.
<b>Reconstitution</b>	Not Applicable

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Selenophosphate synthetase 1 (SEPHS1) belongs to the selenophosphate synthase 1 family, Class II subfamily. It has four different isoforms by alternative splicing. Isoform 1 and isoform 2 are gradually expressed during the cell cycle until G2/M phase and then decreased, while Isoform 3 is gradually expressed during the cell cycle until S phase and then decreased. SEPHS1 can be activated by phosphate ions and by potassium ions. It can synthesize selenophosphate from selenide and ATP. Selenophosphate is the selenium donor used to synthesize selenocysteine, which is co-translationally incorporated into selenoproteins at in-frame UGA codons.

## For Research Use Only

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