

# Recombinant Human SEPHS1

Catalog No: CI93

<b>Description</b>	Recombinant Human Selenophosphate synthase is produced by our Mammalian expression system and the target gene encoding Met1-Ser392 is expressed with a 6His tag at the C-terminus.
<b>Source</b>	Human Cells
<b>Alternative name</b>	Selenide; water dikinase 1;Selenium donor protein 1;Selenophosphate synthase 1;SEPHS1;SELD; SPS; SPS1
<b>Accession No.</b>	P49903
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution of 25mM Tris.HCl,pH7.3,100mM glycine,10% glycerol.
<b>Quality Control</b>	Purity: Greater than 90% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
<b>Shipping</b>	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
<b>Storage</b>	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
<b>Amino Acid Sequence</b>	MSTRESFNPESEYELDKSFRLTRFTELKGTGCKVPQDVLQKLLSLQENHFQEDEQFLGAVMPRLGIGM DTCVIPLRHGGLSLVQTTDYIYPIVDDPYMMGRIACANVLSPLYAMGVTECDNMLMLLGVSINKMTDRER DKVMPLIIQGFKDAEEAGTSVTGGQTVLNPWIVLGGVATTVCQPNEFIMPDNAVPGDVLVLTPLGTQ VAVAVHQWLDIPEKWNKIKLVVTQEDVELAYQEAMMNMARLNRTAAGLMHTFNAHAATDITGFILGH AQNLAQQRNEVSFVIHNLPLAKMAAVSKACGNMFGLMHGTCPETSGGLLICLPREQAARFCAEIKSP KYGEGHQAWIIGIVEKGNRTARIIDKPRIIEVAPQVATQNVNPTPGATSVDDHHHHHH
<b>Background</b>	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, which 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.

## SDS-Page

