

## Product datasheet for PH301830

### Selenophosphate synthetase 2 (SEPHS2) (NM\_012248) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	SEPHS2 MS Standard C13 and N15-labeled recombinant protein (NP_036380)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC201830
Predicted MW:	47.1 kDa
Protein Sequence:	>RC201830 protein sequence Red=Cloning site Green=Tags(s)

MAEASATGACGEAMAAAEGSSGPAGLTLGRSFSNYRPFEPQALGLSPSWRLTGFSGMKG\*GCKVPQEALL  
KLLAGLTRPDVRPPLGRGLVGGQEEASQEAGLPAGAGPSPTFPALGIGMDS CVIPLRHGGLSLVQTDF  
YPLVEDPYMMGRIACANVLSLYAMGITECDNMLMLLSVSQSMSEEREKVTPLMVKGFRDAAEEGGTAV  
TGGQTVVNPWIIIGGVATVVCQPNEFIMPDSAVVGDVLLTKPLGTQVAVNAHQWLDNPERWNKVKMVVS  
REEVELAYQEAMFNMATLNRTAAGLMHTFNAHAATDITGFGILGHSQNLAKQQRNEVSFVIHNLPIIAKM  
AAVSKASGRFGLLQGTSAETSGLLIICLPREQAARFCSEIKSSKYGEGHQAWIVGIVEKGNRTARIIDKP  
RVIEVLPRGATAAVLAPDSSNASSEPS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_036380</a>
RefSeq Size:	2351
RefSeq ORF:	1344
Synonyms:	SPS2



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Locus ID: 22928

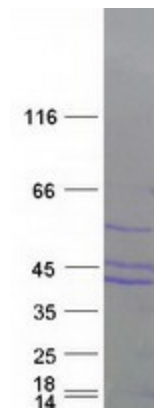
UniProt ID: [Q99611](#)

Cytogenetics: 16p11.2

**Summary:** This gene encodes an enzyme that catalyzes the production of monoselenophosphate (MSP) from selenide and ATP. MSP is the selenium donor required for synthesis of selenocysteine (Sec), which is co-translationally incorporated into selenoproteins at in-frame UGA codons that normally signal translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, the Sec insertion sequence (SECIS) element, which is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. This protein is itself a selenoprotein containing a Sec residue at its active site, suggesting the existence of an autoregulatory mechanism. It is preferentially expressed in tissues implicated in the synthesis of selenoproteins and in sites of blood cell development. A pseudogene for this locus has been identified on chromosome 5. [provided by RefSeq, May 2017]

**Protein Pathways:** Metabolic pathways, Selenoamino acid metabolism

### Product images:



Coomassie blue staining of purified SEPHS2 protein (Cat# [TP301830]). The protein was produced from HEK293T cells transfected with SEPHS2 cDNA clone (Cat# [RC201830]) using MegaTran 2.0 (Cat# [TT210002]).