

## Product datasheet for **TP301830**

### Selenophosphate synthetase 2 (SEPHS2) (NM\_012248) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** SEPHS2 (Myc-DDK-tagged)-Human selenophosphate synthetase 2 (SEPHS2), (Note, selenocysteine protein, internal stop codon, see reference data summary), 20 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC201830 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MAEASATGACGEAMAAAEGSSGPAGLTGRSFSNYRPFEPQALGLSPSWRLTGFSGMKG\*GCKVPQEALL  
KLLAGLTRPDVRPPLGRGLVGGQEEASQEAGLPAGAGPSPTFPALGIGMDSCVIPLRHGGLSLVQTTDFF  
YPLVEDPYMMGRIACANVLSPLYAMGITECDNMLMLLSVSQSMSEEREKVTPLMVKGFRDAAEEGGTAV  
TGGQTVVNPWIIIGGVATVVCQPNFIMPDSAVVGDVLVLTPLGTQVAVNAHQWLDNPERWNKVKMVVS  
REEVELAYQEAMFNMATLNRTAAGLMHTFNAAHAATDITGFGILGHSQNLAKQQRNEVSFVIHNLPIIAKM  
AAVSKASGRFGLLQGTSAETSGLLICLPREQAARFCSEIKSSKYGEGHQAWIVGIVEKGNRTARIIDKP  
RVIEVLPRGATAAVLAPDSSNASSEPSS

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_036380](#)



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**Locus ID:** 22928

**UniProt ID:** [Q99611](#)

**RefSeq Size:** 2351

**Cytogenetics:** 16p11.2

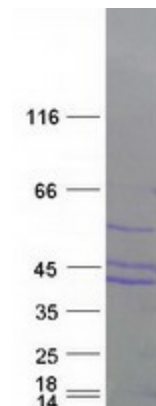
**RefSeq ORF:** 1344

**Synonyms:** SPS2

**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]).