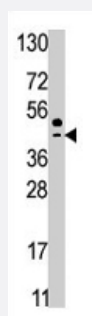


# SEPHS2 polyclonal antibody

Catalog # PAB2041

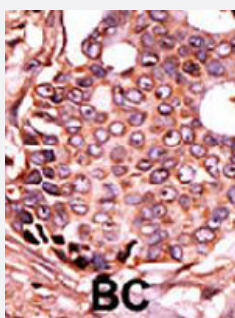
Size 400 uL

## Applications



### Western Blot (Cell lysate)

Western blot analysis of SEPHS2 polyclonal antibody (Cat # PAB2041) in HepG2 cell line lysate (35 ug/lane). SEPHS2 (arrow) was detected using the purified Polyclonal antibody.



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with SEPHS2 polyclonal antibody (Cat # PAB2041), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.

This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

## Specification

<b>Product Description</b>	Rabbit polyclonal antibody raised against synthetic peptide of SEPHS2.
<b>Immunogen</b>	A synthetic peptide (conjugated with KLH) corresponding to internal region of human SEPHS2.
<b>Host</b>	Rabbit
<b>Reactivity</b>	Human
<b>Form</b>	Liquid
<b>Purification</b>	Protein G purification

<b>Recommend Usage</b>	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS (0.09% sodium azide)
<b>Storage Instruction</b>	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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## Gene Info — SEPHS2

<b>Entrez GeneID</b>	<a href="#">22928</a>
<b>Protein Accession#</b>	<a href="#">NP_036380:Q99611</a>
<b>Gene Name</b>	SEPHS2
<b>Gene Alias</b>	SPS2
<b>Gene Description</b>	selenophosphate synthetase 2
<b>Omim ID</b>	<a href="#">606218</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

## Gene Summary

This gene encodes an enzyme that synthesizes 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. This protein itself contains a selenocysteine residue in its predicted active site. The 3' UTR of the gene has a stem-loop secondary structure called a selenocysteine insertion sequence (SECIS) element, which allows UGA to direct the incorporation of selenocysteine rather than signal a translational stop. Alternatively spliced transcripts have been identified, but their biological validity has not been determined. [provided by RefSeq]

## Other Designations

OTTHUMP00000045871|selenide,water dikinase 2|selenium donor protein 2|selenophosphate synthase

## Publication Reference

- [Selenophosphate synthetase genes from lung adenocarcinoma cells: Sps1 for recycling L-selenocysteine and Sps2 for selenite assimilation.](#)

Tamura T, Yamamoto S, Takahata M, Sakaguchi H, Tanaka H, Stadtman TC, Inagaki K.

PNAS 2004 Nov; 101(46):16162.

- [Novel selenoproteins identified in silico and in vivo by using a conserved RNA structural motif.](#)

Lescure A, Gautheret D, Carbon P, Krol A.

The Journal of Biological Chemistry 1999 Dec; 274(53):38147.

- [Identification of a novel selD homolog from eukaryotes, bacteria, and archaea: is there an autoregulatory mechanism in selenocysteine metabolism?](#)

Guimaraes MJ, Peterson D, Vicari A, Cocks BG, Copeland NG, Gilbert DJ, Jenkins NA, Ferrick DA, Kastelein RA, Bazan JF, Zlotnik A.

PNAS 1996 Dec; 93(26):15086.

Application: IP, WB-Tr, Monkey, COS-7 cells

## Pathway

- [Metabolic pathways](#)
- [Selenoamino acid metabolism](#)