

Rabbit anti-Human SEPHS2 Polyclonal Antibody | anti-SEPHS2 antibody

Anti-SEPHS2 Antibody, Rabbit Polyclonal

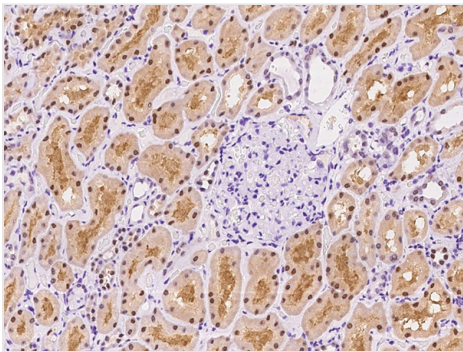
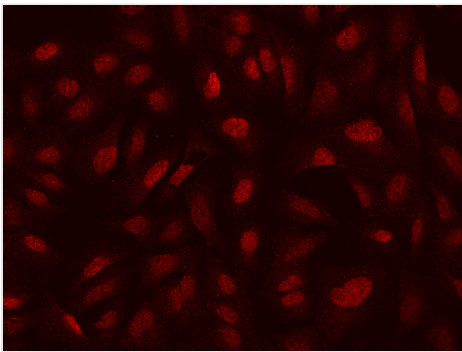
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA256341	Rabbit	Human	Immunofluorescence, Immunocytochemistry, Immunohistochemistry

PRODUCT SYNONYMS

SEPHS2; Polyclonal Antibody; Anti-SEPHS2 Antibody; Rabbit Polyclonal; SEPHS2 Antibody; Rabbit PAb; Antigen Affinity Purified; selenophosphate synthetase 2; Anti-SPS2 Antibody; Anti-SPS2b Antibody; anti-SEPHS2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Human SEPHS2
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; PBS, pH7.0 with 0.03% Proclin300
Applicable Applications for anti-SEPHS2 antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry)
Immunogen	E Coli-derived Human SEPHS2 fragment
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with E Coli-derived Human SEPHS2 fragment, and purified by antigen affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Avoid repeated freeze-thaw cycles.



IF (Immunofluorescence)
Immunofluorescence staining of SEPHS2 in U2OS cells. Cells were fixed with 4% PFA, permeabilized with 0.1% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human SEPHS2 polyclonal antibody (dilution ratio 1:100) at 4 degree C overnight. Then cells were stained with the Alexa Fluor594-conjugated Goat Anti-rabbit IgG secondary antibody (red). Positive staining was localized to Nucleus.

IHC (Immunohistochemistry)
Immunochemical staining of human SEPHS2 in human kidney with rabbit polyclonal antibody at 1:500 dilution, formalin-fixed paraffin embedded sections.

ADDITIONAL INFORMATION

Related Product Information for anti-SEPHS2 antibody	Selenophosphate synthetase 2 (SEPHS2) synthesizes selenide and ATP into selenophosphate, the selenium donor for selenocysteine (Sec), which is cotranslationally incorporated into selenoproteins. SEPHS was initially identified and isolated from bacteria and has been characterized in many eukaryotes and archaea. Two SEPHS paralogues, SEPHS1 and SEPHS2, occur in various eukaryotes, while prokaryotes and archaea have only one form of SEPHS. Between the two isoforms in eukaryotes, only SEPHS2 shows catalytic activity during selenophosphate synthesis. SEPHS2 is essential for the survival of cancer, but not normal, cells. SEPHS2 is required in cancer cells to detoxify selenide, an intermediate that is formed during selenocysteine biosynthesis. Although SEPHS1 does not contain any significant selenophosphate synthesis activity, it has been reported to play an essential role in regulating cellular physiology.
References	Nunziata C, et al. (2019) Structural analysis of human sephs2 protein, a selenocysteine machinery component, over-expressed in triple negative breast cancer. Sci Rep 9 (1): 16131. Na J, et al. (2018) Selenophosphate synthetase 1 and its role in redox homeostasis, defense and proliferation. Free Radic Biol Med 127 190-197. Mallonee DH, et al. (2011) Use of stringent selection parameters for the identification of possible selenium-responsive marker genes in mouse liver and gastrocnemius. Biol Trace Elem Res 143 (2): 992-1006.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.