SEPHS1 (F-6): sc-365945

BACKGROUND

SEPHS1 (selenophosphate synthetase 1), also known as SELD, SPS or SPS1, is a 392 amino acid member of the selenophosphate synthetase 1 family and is one of two mammalian homologs of the eubacteria selenophosphate synthetase protein SelD. SelD is an enzyme that generates the selenium donor for the biosynthesis of selenocysteine, an amino acid that is co-translationally incorporated into selenoproteins at in-frame UGA codons. SEPHS1 has a similar function to SelD and specifically catalyzes the formation of selenothione protein SelD. SelD is an enzyme that generates the selenium donor for the biosynthesis of selenocysteine, thereby providing the substrates for selenoprotein synthesis.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: SEPHS1 (human) mapping to 10p13; Sephs1 (mouse) mapping to 1-65 mapping at the N-terminus of SEPHS1 of human origin.

SOURCE

SEPHS1 (F-6) is a mouse monoclonal antibody raised against amino acids 1-65 mapping at the N-terminus of SEPHS1 of human origin.

PRODUCT

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

SEPHS1 (F-6) is available conjugated to agarose (sc-365945 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365945 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365945 PE), fluorescein (sc-365945 FITC), Alexa Fluor® 488 (sc-365945 AF488), Alexa Fluor® 546 (sc-365945 AF546), Alexa Fluor® 594 (sc-365945 AF594) or Alexa Fluor® 647 (sc-365945 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365945 AF680) or Alexa Fluor® 790 (sc-365945 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

SEPHS1 (F-6) is recommended for detection of SEPHS1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG BP-HRP: sc-516102 or m-IgG BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organic/Limonene Mount: sc-45087.

DATA

SEPHS1 (F-6): sc-365945. Western blot analysis of SEPHS1 expression in c4 (A), C6 (B), Jurkat (C), Hep G2 (D) and T-47D (E) whole cell lysates and rat liver tissue extract (F).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.