

SEPSECS Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18403b

Specification

SEPSECS Antibody (C-term) - Product Information

Application WB.E **Primary Accession 09HD40** NP 058651.3 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 55726 Antigen Region 444-474

SEPSECS Antibody (C-term) - Additional Information

Gene ID 51091

Other Names

O-phosphoseryl-tRNA(Sec) selenium transferase, Liver-pancreas antigen, LP, SLA-p35, SLA/LP autoantigen, Selenocysteine synthase, Sec synthase, Selenocysteinyl-tRNA(Sec) synthase, Sep-tRNA:Sec-tRNA synthase, SepSecS, Soluble liver antigen, SLA, UGA suppressor tRNA-associated protein, tRNA(Ser/Sec)-associated antigenic protein, SEPSECS, TRNP48

Target/Specificity

This SEPSECS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 444-474 amino acids from the C-terminal region of human SEPSECS.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SEPSECS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SEPSECS Antibody (C-term) - Protein Information



Name SEPSECS

Synonyms TRNP48

Function Converts O-phosphoseryl-tRNA(Sec) to selenocysteinyl- tRNA(Sec) required for selenoprotein biosynthesis.

Cellular Location Cytoplasm.

Tissue Location

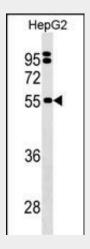
Primarily expressed in liver, pancreas, kidney and lung. Overexpressed in PHA-stimulated T-cells

SEPSECS Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

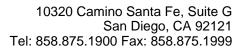
SEPSECS Antibody (C-term) - Images



SEPSECS Antibody (C-term) (Cat. #AP18403b) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the SEPSECS Antibody detected the SEPSECS protein (arrow).

SEPSECS Antibody (C-term) - Background

The 21st amino acid, selenocysteine (sec), is distinct from other amino acids because it lacks its own tRNA synthetase and is the only amino acid synthesized on its cognate tRNA. Synthesis of sec begins with acylation of tRNA(sec) (TRSP; MIM 165060) by seryl-tRNA synthetase (SARS; MIM 607529) to give ser-tRNA(sec), which is subsequently phosphorylated by O-phosphoseryl-tRNA kinase (PSTK; MIM 611310) to give O-phosphoseryl-tRNA(sec). SEPSECS





catalyzes the final step of sec synthesis by converting O-phosphoseryl-tRNA(sec) to selenocysteinyl-tRNA(sec) using selenophosphate as the selenium donor (Palioura et al., 2009 [PubMed 19608919]).

SEPSECS Antibody (C-term) - References

Agamy, O., et al. Am. J. Hum. Genet. 87(4):538-544(2010) Hart, K., et al. Lung Cancer (2010) In press: Volkmann, M., et al. J. Autoimmun. 34(1):59-65(2010) Palioura, S., et al. Science 325(5938):321-325(2009) Xu, X.M., et al. PLoS Biol. 5 (1), E4 (2007):