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SEPSECS Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18403b

Product Information

Application	WB, E
Primary Accession	Q9HD40
Other Accession	NP_058651.3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB38450
Calculated MW	55726
Antigen Region	444-474

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.

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

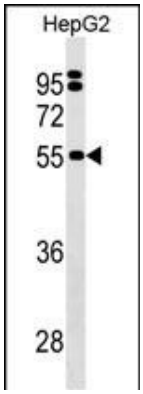
Background

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]).

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) :

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).