10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SPATA5L1 Rabbit pAb

Catalog # AP96954

Product Information

Application	WB
Primary Accession	Q9BVQ7
Other Accession	Q9BVQ7
Reactivity	Human
Predicted	Rat, Mouse, Rabbit, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	80710
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPATA5L1
Epitope Specificity	221-320/753
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the AAA ATPase family. AFG2 subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SPATA5L1 is a 753 amino acid protein belonging to the AAA ATPase family and AFG2 subfamily. Single nucleotide polymorphisms (SNPs) present in SPATA5L1 at the glycine amidinotransferase (GATM)-SPATA5L1 locus have been found to correlate with glomerular filtration rate (GFR), having significant implications for kidney disease research. SPATA5L1 localizes to cytoplasm and exists as three alternatively spliced isoforms. The gene encoding SPATA5L1 maps to human chromosome 15q21.1. Encoding more than 700 genes, chromosome 15 is made up of approximately 106 million base pairs and comprises about 3% of the human genome. Tay-Sachs disease is a lethal disorder associated with mutations of the HEXA gene, which is encoded by chromosome 15. Marfan syndrome is associated with chromosome 15 through the FBN1 gene.

Additional Information

Gene ID	79029
Other Names	AFG2B; DFNB119; NEDHLS; SPATA5L1; AFG2B_BOVIN; AFG2 AAA ATPase homolog B; Ribosome biogenesis protein SPATA5L1; Spermatogenesis-associated protein 5-like protein 1; 3.6.4.10; AFG2B_HUMAN;
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	AFG2B (HGNC:28762)
Function	ATP-dependent chaperone part of the 55LCC heterohexameric ATPase complex which is chromatin-associated and promotes replisome proteostasis to maintain replication fork progression and genome stability. Required for replication fork progression, sister chromatid cohesion, and chromosome stability. The ATPase activity is specifically enhanced by replication fork DNA and is coupled to cysteine protease- dependent cleavage of replisome substrates in response to replication fork damage. Uses ATPase activity to process replisome substrates in S- phase, facilitating their proteolytic turnover from chromatin to ensure DNA replication and mitotic fidelity (PubMed:38554706). Plays an essential role in the cytoplasmic maturation steps of pre-60S ribosomal particles by promoting the release of shuttling protein RSL24D1/RLP24 from the pre-ribosomal particles (PubMed:35354024).
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, spindle. Nucleus {ECO:0000250|UniProtKB:D4A2B7}
Tissue Location	Expressed in both neurons and glia during embryonic and adult stages of brain development.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.