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LRSAM1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59241

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q6UWE0
Reactivity	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	83594
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LRSAM1
Epitope Specificity	201-300/723
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Note=Displays a punctuate distribution and localizes to a submembranal ring.
SIMILARITY	Contains 6 LRR (leucine-rich) repeats. Contains 1 RING-type zinc finger. Contains 1 SAM (sterile alpha motif) domain.
SUBUNIT	Interacts with TSG101.
DISEASE	Defects in LRSAM1 are a cause of Charcot-Marie-Tooth disease type 2P (CMT2P) [MIM:614436]. CMT2P is an axonal form of Charcot-Marie-Tooth disease, a disorder of the peripheral nervous system, characterized by progressive weakness and atrophy, initially of the peroneal muscles and later of the distal muscles of the arms. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathies (designated CMT1 when they are dominantly inherited) and primary peripheral axonal neuropathies (CMT2). Neuropathies of the CMT2 group are characterized by signs of axonal degeneration in the absence of obvious myelin alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy. Nerve conduction velocities are normal or slightly reduced.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	LRSAM1 is an E3 ubiquitin-protein ligase that mediates monoubiquitination of TSG101 at multiple sites, leading to inactivation of the ability of TSG101 to sort endocytic (EGF receptors) and exocytic (HIV-1 viral proteins) cargos. It selectively regulates cell adhesion molecules and plays a role in receptor endocytosis and viral budding. LRSAM1 contains a RING-type zinc finger, 5 leucine-rich repeats and 1 SAM (sterile alpha motif) domain. The coiled coil domains interact with the SB domain of TSG101. The PTAP motifs mediate the binding to UEV domains. There are 3 isoforms produced by alternative splicing.

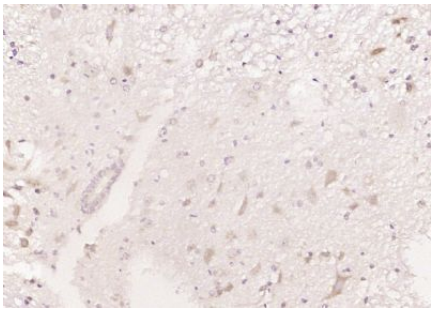
Additional Information

Gene ID	90678
Other Names	E3 ubiquitin-protein ligase LRSAM1, 2.3.2.27, Leucine-rich repeat and sterile alpha motif-containing protein 1, RING-type E3 ubiquitin transferase LRSAM1, Tsg101-associated ligase, hTAL, LRSAM1 {ECO:0000303|PubMed:20865121}
Target/Specificity	Highly expressed in adult spinal cord motoneurons as well as in fetal spinal cord and muscle tissue.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	LRSAM1 {ECO:0000303|PubMed:20865121}
Function	E3 ubiquitin-protein ligase that mediates monoubiquitination of TSG101 at multiple sites, leading to inactivate the ability of TSG101 to sort endocytic (EGF receptors) and exocytic (HIV-1 viral proteins) cargos (PubMed:15256501). Bacterial recognition protein that defends the cytoplasm from invasive pathogens (PubMed:23245322). Localizes to several intracellular bacterial pathogens and generates the bacteria-associated ubiquitin signal leading to autophagy-mediated intracellular bacteria degradation (xenophagy) (PubMed:23245322, PubMed:25484098).
Cellular Location	Cytoplasm. Note=Displays a punctuate distribution and localizes to a submembranal ring (PubMed:15256501). Localizes to intracellular bacterial pathogens (PubMed:23245322)
Tissue Location	Highly expressed in adult spinal cord motoneurons as well as in fetal spinal cord and muscle tissue

Images



Paraformaldehyde-fixed, paraffin embedded (mouse spinal cord); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (LRSAM1) Polyclonal Antibody, Unconjugated (AP59241) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.