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TSG101 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2155a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q99816
Other Accession	NP_006283
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB04442
Calculated MW	43944
Antigen Region	1-30

Additional Information

Gene ID	7251
Other Names	Tumor susceptibility gene 101 protein, ESCRT-I complex subunit TSG101, TSG101
Target/Specificity	This TSG101 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human TSG101.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	TSG101 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TSG101
Function	Component of the ESCRT-I complex, a regulator of vesicular trafficking process. Binds to ubiquitinated cargo proteins and is required for the sorting of endocytic ubiquitinated cargos into multivesicular bodies (MVBs). Mediates

	the association between the ESCRT-0 and ESCRT-I complex. Required for completion of cytokinesis; the function requires CEP55. May be involved in cell growth and differentiation. Acts as a negative growth regulator. Involved in the budding of many viruses through an interaction with viral proteins that contain a late-budding motif P-[ST]-A-P. This interaction is essential for viral particle budding of numerous retroviruses. Required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:22660413). It may also play a role in the extracellular release of microvesicles that differ from the exosomes (PubMed:22315426).
Cellular Location	Cytoplasm. Early endosome membrane; Peripheral membrane protein; Cytoplasmic side. Late endosome membrane; Peripheral membrane protein. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Midbody, Midbody ring. Nucleus. Note=Mainly cytoplasmic. Membrane-associated when active and soluble when inactive. Nuclear localization is cell cycle-dependent. Interaction with CEP55 is required for localization to the midbody during cytokinesis
Tissue Location	Heart, brain, placenta, lung, liver, skeletal, kidney and pancreas

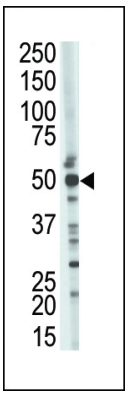
Background

TSG101 belongs to a group of apparently inactive homologs of ubiquitin-conjugating enzymes. The gene product contains a coiled-coil domain that interacts with stathmin, a cytosolic phosphoprotein implicated in tumorigenesis. The protein may play a role in cell growth and differentiation and act as a negative growth regulator. In vitro steady-state expression of this tumor susceptibility gene appears to be important for maintenance of genomic stability and cell cycle regulation. Mutations and alternative splicing in this gene occur in high frequency in breast cancer and suggest that defects occur during breast cancer tumorigenesis and/or progression.

References

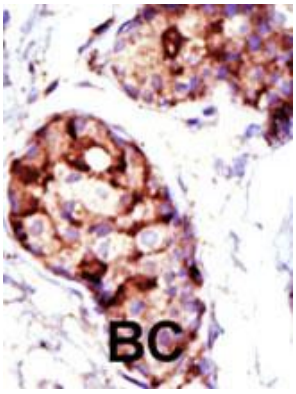
Favre, M., et al., J. Acquir. Immune Defic. Syndr. 34(2):127-133 (2003).
Lu, Q., et al., Proc. Natl. Acad. Sci. U.S.A. 100(13):7626-7631 (2003).
Goila-Gaur, R., et al., J. Virol. 77(11):6507-6519 (2003).
Blanco, S., et al., FEMS Microbiol. Lett. 221(2):151-154 (2003).
Martin-Serrano, J., et al., J. Virol. 77(8):4794-4804 (2003).

Images



The anti-TSG101 Pab (Cat. #AP2155a) is used in Western blot to detect TSG101 in mouse kidney tissue lysate.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody,



followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.