

Anti-TSG101 Antibody

Catalog # ABO12756

Specification

Anti-TSG101 Antibody - Product Information

ApplicationWBPrimary Accession099816HostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Tumor susceptibility gene 101 protein(TSG101) detection.Tested with WB in Human;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TSG101 Antibody - Additional Information

Gene ID 7251

Other Names Tumor susceptibility gene 101 protein, ESCRT-I complex subunit TSG101, TSG101

Calculated MW 43944 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Rat

Subcellular Localization

Cytoplasm. Membrane; Peripheral membrane protein. Nucleus. Late endosome membrane; Peripheral membrane protein. Mainly cytoplasmic. Membrane-associated when active and soluble when inactive. Depending on the stage of the cell cycle, detected in the nucleus. Colocalized with CEP55 in the midbody during cytokinesis.

Tissue Specificity Heart, brain, placenta, lung, liver, skeletal, kidney and pancreas.

Protein Name Tumor susceptibility gene 101 protein

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human TSG101 (361-390aa KHVRLLSRKQFQLRALMQKARKTAGLSDLY), identical to the related mouse and rat sequences.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Belongs to the ubiquitin-conjugating enzyme family. UEV subfamily.

Anti-TSG101 Antibody - 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

Anti-TSG101 Antibody - Protocols

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

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



• <u>Cell Culture</u> Anti-TSG101 Antibody - Images



Anti- TSG101 antibody, ABO12756, Western blottingAll lanes: Anti TSG101 (ABO12756) at 0.5ug/mlLane 1: Rat Cardiac Muscle Tissue Lysate at 50ugLane 2: Rat Brain Tissue Lysate at 50ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: SMMC Whole Cell Lysate at 40ugPredicted bind size: 44KDObserved bind size: 44KD

Anti-TSG101 Antibody - Background

TSG101, known as Tumor susceptibility gene 101, is mapped to 11p15. The protein encoded by this gene 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. And 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.