abcam

ab209927

PE Anti-TSG101 antibody [EPR7130(B)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR7130(B)
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/5000

Notes	The cellular localisation of this product has been verified in ICC/IF.

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Human, Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information Tumor susceptibility gene 101 protein

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).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Do Not Freeze, Store in the dark

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	TSG101 also known as Tumor Susceptibility Gene 101 is a protein involved in intracellular trafficking specifically notable within the process of endosomal sorting. It is a component of the ESCRT-I (Endosomal Sorting Complex Required for Transport-I) complex. TSG101 is approximately 46 kDa and is expressed ubiquitously across various tissues. The mechanistic function of TSG101 involves the recognition and ubiquitination of cargo proteins an important step in the formation of multivesicular bodies.
Biological function summary	TSG101 plays a critical role in the sorting and trafficking of proteins destined for lysosomal degradation or recycling back to the plasma membrane. It is an essential part of the ESCRT machinery which also includes other components like VPS37 and VPS28. TSG101 interacts with specific domains and motifs on target proteins facilitating the recognition and recruitment of these proteins into vesicles. Its involvement in membrane budding and scission makes it important for maintaining cellular homeostasis and protein quality control.

Pathways	TSG101 is integrally involved in the ESCRT pathway and is associated with processes like viral budding and cytokinesis. Within these pathways it collaborates with proteins such as ALIX and the ESCRT-II component VPS25 to mediate vesicle formation and facilitate the trafficking of ubiquitinated cargo. The ESCRT pathway is vital in cellular responses such as membrane repair and is important for the life cycle of certain enveloped viruses which utilize host cell machinery for budding.
Associated diseases and disorders	Defects or alterations in TSG101 expression have correlations with tumor progression and neurodegenerative diseases. Disruptions in the function of TSG101 can affect cellular processes potentially contributing to conditions like cancer and Alzheimer's disease. For example the aberrant activity of TSG101 may interact with proteins like Hrs and ubiquitin ligases Mdm2 in the context of oncogenic signaling pathways which can drive tumor growth and metastasis. Understanding these interactions is key to uncovering potential therapeutic targets within these diseases.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

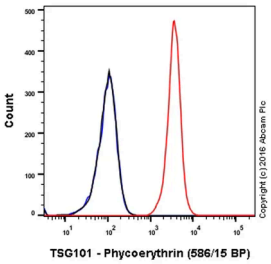
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

1 product image



Flow Cytometry (Intracellular) - PE Anti-TSG101 antibody [EPR7130(B)] (ab209927)

TSG101 Flow Cytometry (Intracellular) staining using rabbit Anti-TSG101 antibody

Overlay histogram showing Jurkat cells stained with ab209927 (red line). The cells were fixed with 4% formaldehyde and 80% Methanol and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab209927, 1/5000 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Phycoerythrin (ab209478) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 50mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

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