Technical Data Sheet

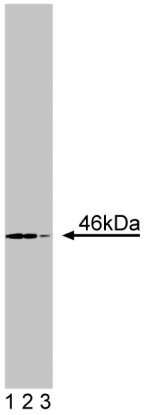
Purified Mouse Anti-TSG101

Product Information

Material Number:	**612696**
Alternate Name:	Tumor Susceptibility Gene 101
Size:	50 µg
Concentration:	250 µg/ml
Clone:	51/TSG101
Immunogen:	Human TSG101 aa. 229-319
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Mouse, Rat, Dog
Target MW:	46 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Tumor Susceptibility Gene 101 (TSG101) was identified in a random mutagenesis screen for potential tumor suppressors in NIH 3T3 cells. Altered transcripts of this gene have been detected in sporadic breast cancers and many other human malignancies. Though the function of TSG101 is not clearly understood, its protein structure includes motifs involved in transcription regulation, and TSG101 has been shown to modulate the activation of steroid hormone receptors. In addition, TSG101 may have a role in regulating ubiquination. The N-terminal region of TSG101 contains a domain that resembles the catalytically active region of ubiquitin conjugases. However, TSG101 lacks an active-site cysteine crucial to the function of these conjugases. Interestingly, TSG101 interferes with MDM2 ubiquination leading to a decrease in MDM2 decay and down-regulation of p53 protein. Thus, TSG101 may function as a dominant-negative inhibitor of ubiquination in pathways where protein expression is tightly regulated.



Western blot analysis of TSG101 on a K-562 cell lysate (Human bone marrow myelogenous leukemia; ATCC CCL-243). *Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of the mouse anti-TSG101 antibody.*

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611550	K-562 Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Li L, Cohen SN. Tsg101: a novel tumor susceptibility gene isolated by controlled homozygous functional knockout of allelic loci in mammalian cells. *Cell.* 1996; 85(3):319-329.(Biology)

Li L, Liao J, Ruland J, Mak TW, Cohen SN. A TSG101/MDM2 regulatory loop modulates MDM2 degradation and MDM2/p53 feedback control. *Proc Natl Acad Sci U S A.* 2001; 98(4):1619-1624.(Biology)

Zhong Q, Chen CF, Chen Y, Chen PL, Lee WH. Identification of cellular TSG101 protein in multiple human breast cancer cell lines. *Cancer Res.* 1997; 57(19):4225-4228.(Biology)