# abcam

## Product datasheet

## Anti-TSG101 antibody [4A10] - BSA and Azide free ab83

★★★★★ 3 Abreviews 254 References 11 图像

概述

产品名称 Anti-TSG101抗体[4A10] - BSA and Azide free

**小**鼠单克隆抗体[4A10] to TSG101 - BSA and Azide free

宿主 Mouse

特异性 This antibody recognizes the TSG-101 protein, the product of a recently identified tumor

susceptibility gene the inactivation of which in mouse fibroblasts results in cell transformation and

the ability of those cells to form tumors in nude mice.

经测试应用 适用于: Flow Cyt, WB, IHC-P

种属反应性 与反应: Mouse, Human

免疫原 Recombinant fragment within Human TSG101 aa 150 to the C-terminus. The exact immunogen

sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** 

our Scientific Support team to discuss your requirements. Expressed in E.coli

Database link: Q99816

**阳性**对照 WB: Neuro-2a, C8D30, NIH/3T3, RAW 264.7, C2C12, HeLa, HepG2, A431, K562 and THP-1

whole cell lysate, mouse testis. ICC/IF: Amyloid peptide-treated mouse astrocytes IHC-P: human

ovarian cancer tissue, human breast carcinoma tissue. Flow cyt: THP-1 cells

常规说明 This product was changed from ascites to tissue culture supernatant on 12th February 2018.

Please note that the dilutions may need to be adjusted accordingly. If you have any questions,

please do not hesitate to contact our scientific support team.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies

and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

1

**存储溶液** pH: 7.40

Constituent: 100% PBS

w/o preservative

**无载体** 是

纯**度** Protein G purified

纯**化说明** Purified from tissue culture supernatant by Protein G chromatography to at least 95%

homogeneity as determined by SDS-PAGE.

 克隆
 单克隆

 克隆编号
 4A10

 骨髓瘤
 NS1

 同种型
 IgG1

 轻链类型
 kappa

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab83于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		Use at an assay dependent concentration. <b>ab170190</b> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
WB	<b>★★★★</b> (3)	1/500 - 1/3000. Detects a band of approximately 47 kDa (predicted molecular weight: 43 kDa).
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### 靶标

功能 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-1 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.

组织**特异性** Heart, brain, placenta, lung, liver, skeletal, kidney and pancreas.

序列相似性 Belongs to the ubiquitin-conjugating enzyme family. UEV subfamily.

Contains 1 SB (steadiness box) domain.
Contains 1 UEV (ubiquitin E2 variant) domain.

结**构域** The UEV domain is required for the interaction of the complex with ubiquitin. It also mediates the

interaction with PTAP/PSAP motifs of HIV-1 P6 protein and human spumaretrovirus Gag protein.

The coiled coil domain may interact with stathmin.

The UEV domain binds ubiquitin and P-[ST]-A-P peptide motif independently.

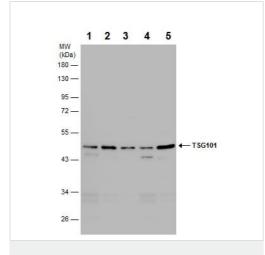
#### 翻译后修饰

Monoubiquitinated at multiple sites by LRSAM1 and by MGRN1. Ubiquitination inactivates it, possibly by regulating its shuttling between an active membrane-bound protein and an inactive soluble form. Ubiquitination by MGRN1 requires the presence of UBE2D1.

#### 细胞定位

Cytoplasm. Membrane. Nucleus. Late endosome membrane. 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.

#### 图片



Western blot - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

**All lanes :** Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83) at 1/500 dilution

Lane 1 : Neuro-2a (Mouse neuroblastoma cell line) whole cell

Lane 2: C8D30 whole cell lysate

Lane 3: NIH/3T3 (mouse embryo fibroblast cell line) whole cell

**Lane 4:** RAW 264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 5: C2C12 (mouse myoblast cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

#### Secondary

**All lanes :** HRP-conjugated anti-mouse lgG antibody at 1/500 dilution

Predicted band size: 43 kDa

10% SDS PAGE

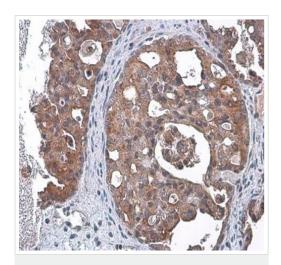
Running conditions: 80V for 15min then 140V for 40min

**Blocking:** 5% non-fat milk in TBST at room temperature for 60min.

Washing conditions: 5 ml TBST, 4 x 5min

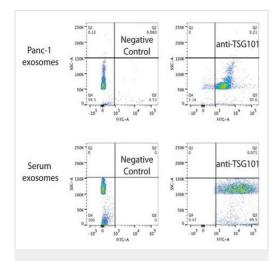
Transfer conditions: Semi-dry, 18 V, 60min (NC membrane)

Exposure system: Trident plus Western HRP Substrate



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

Immunohistochemical analysis of paraffin-embedded human ovarian cancer tissue labeling TSG101 with ab83 at 1/100 dilution. Cytoplasmic staining is observed. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min. (Cuisinart Electric Pressure Cooker #EPC-1200, choose "high pressure"). Endogenous peroxidase blocking: 3% H<sub>2</sub>O<sub>2</sub>, RT, 30min. Blocking condition: 1.5% goat serum (dilute goat serum by 1xPBS), RT, 30min. Primary antibody incubation: 4°C overnight. Secondary antibody incubation: HRP Kit (Mouse IgG), 1:200, RT, 30min. Washing: PBS, 2 x 5 minutes. DAB detection.

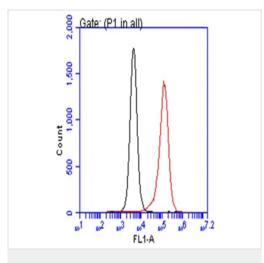


Flow Cytometry - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

Image from Kahlert C et al., J Biol Chem. 2014;289(7):3869-75. Fig 1(C).; doi: 10.1074/jbc.C113.532267.

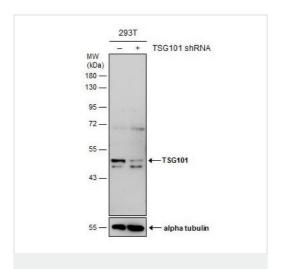
Panc-1 and Serum Exosomes were characterized by the exosomespecific expression of TSG101 by FACS analysis.

Exosomes were attached to 4-µm aldehyde/sulfate latex beads by mixing ~30 µg of exosomes in a 100-µl volume of beads for 2 hours at room temperature. This suspension was diluted to 1 ml with PBS, and the reaction was stopped with 100 mm glycine and 2% BSA in PBS. Exosome-bound beads were washed in PBS/1% BSA, blocked with 10% BSA, and stained for FACS with anti-TSG101 (1:400, ab83). An Alexa Fluor® 488 conjugated anti-mouse IgG was used as the secondary antibody.



Flow Cytometry analysis of THP-1 cells labeling TSG101 with ab83 at 1/25 dilution (red). Unlabelled sample was used as a control (black). A Dylight 488-conjugated secondary antibody was used for FACS analysis.

Flow Cytometry - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)



Western blot - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

**All lanes :** Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83) at 1/500 dilution

Lane 1: Non-transfected (-) 293T whole cell extracts

Lane 2: TSG101 shRNA transfected (+) 293T whole cell extracts

Lysates/proteins at 30 µg per lane.

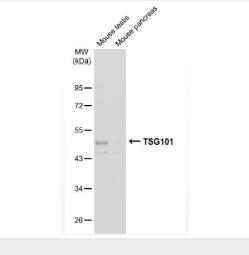
## Secondary

All lanes: HRP-conjugated anti-mouse IgG antibody

Developed using the ECL technique.

Predicted band size: 43 kDa

10% SDS-PAGE



Western blot - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

**All lanes :** Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83) at 1/500 dilution

Lane 1: Mouse testis tissue extract

Lane 2: Mouse pancreas tissue extract

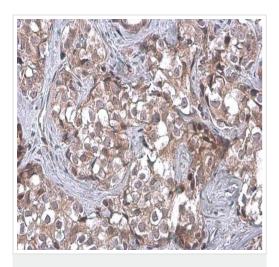
Lysates/proteins at 50 µg per lane.

## **Secondary**

All lanes: HRP-conjugated anti-mouse IgG antibody

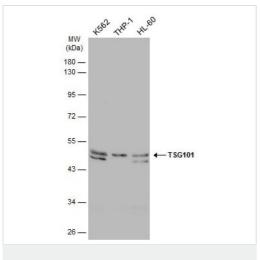
Developed using the ECL technique.

Predicted band size: 43 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue labeling TSG101 with ab83 at 1/100 dilution. Cytoplasmic staining is observed. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



Western blot - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

All lanes: Anti-TSG101 antibody [4A10] - BSA and Azide free

(ab83) at 1/500 dilution

Lane 1 : K562 whole cell extract
Lane 2 : THP-1 whole cell extract

Lane 3: HL-60 whole cell extract

Lysates/proteins at 30 µg per lane.

## Secondary

All lanes: HRP-conjugated anti-mouse IgG antibody

Developed using the ECL technique.

Predicted band size: 43 kDa

10% SDS-PAGE

A B C
72 — A B C
55 — 43 — 43 — 26 — 17 —

Western blot - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

**All lanes :** Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83) at 1/500 dilution

Lane 1: NIH-3T3 whole cell lysate/extract

Lane 2 : JC (mouse mammary adenocarcinoma) whole cell

lysate/extract

Lane 3: BCL-1 whole cell lysate/extract

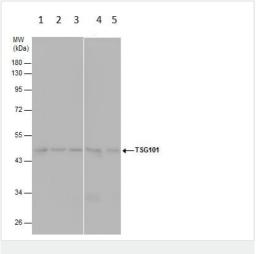
Lysates/proteins at 30 µg per lane.

#### Secondary

All lanes: HRP-conjugated anti-mouse IgG antibody

Predicted band size: 43 kDa

10% SDS-PAGE



Western blot - Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83)

Predicted band size: 43 kDa

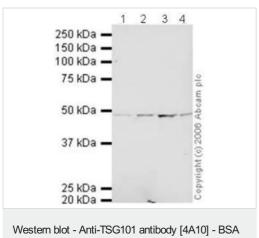
(ab83) at 1/500 dilution

Lane 1: A431 whole cell lysate

Lane 2: HeLa whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: K562 whole cell lysate

Lane 5: THP-1 whole cell lysate

Lysates/proteins at 30 µg per lane.



and Azide free (ab83)

All lanes: Anti-TSG101 antibody [4A10] - BSA and Azide free (ab83) at 1 µg/ml

All lanes: Anti-TSG101 antibody [4A10] - BSA and Azide free

Lane 1: HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2: A-431 whole cell lysate (ab7909)

Lane 3: Jurkat whole cell lysate (ab7899) Lane 4: HEK-293 whole cell lysate (ab7902)

Lysates/proteins at 20 µg per lane.

#### **Secondary**

All lanes: Donkey polyclonal to Mouse IgG (IRDyeTM 700DX) at 1/10000 dilution

Predicted band size: 43 kDa Observed band size: 49 kDa

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