abcam

Product datasheet

Anti-Smg1 antibody ab30916

★★★★★ 3 Abreviews 8 References 3 图像

概述

产品名称 Anti-Smg1抗体

描述 兔多克隆抗体to Smg1

宿主 Rabbit

经测试应用 适用于: ICC/IF, WB

种属反应性 与反应: Human

预测可用于: Mouse, Xenopus laevis 🔷

免疫原 Synthetic peptide conjugated to KLH derived from within residues 3600 - C-terminus of Human

Smg1.参阅Abcam的专有抗源政策(Peptide available as ab31816.)

阳性对照 HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate, Jurkat (Human T cell lymphoblast-

like cell line) Whole Cell Lysate, A431 (Human epithelial carcinoma cell line) Whole Cell Lysate.

常规说明

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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

 $80^{\circ}\text{C}\,.$ Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

1

克隆 多克隆

同种型 IgG

应用

The Abpromise guarantee Abpromise 承诺保证使用ab30916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
ICC/IF	★★★★ (1)	
WB	★★★★★ (2)	

应用说明

ICC/IF: Use at 1:200 (See Abreview Feb 20 2007).

WB: Use at a concentration of 1 μ g/ml. Detects a band of approximately 340 kDa (predicted molecular weight: 340 kDa).

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

靶标

功能 Serine/threonine protein kinase involved in both mRNA surveillance and genotoxic stress

response pathways. Recognizes the substrate consensus sequence [ST]-Q. Plays a central role in nonsense-mediated decay (NMD) of mRNAs containing premature stop codons by phosphorylating UPF1/RENT1. Recruited by release factors to stalled ribosomes together with SMG8 and SMG9 (forming the SMG1C protein kinase complex), and UPF1 to form the transient SURF (SMG1-UPF1-eRF1-eRF3) complex. In EJC-dependent NMD, the SURF complex associates with the exon junction complex (EJC) through UPF2 and allows the formation of an UPF1-UPF2-UPF3 surveillance complex which is believed to activate NMD. Also acts as a genotoxic stress-activated protein kinase that displays some functional overlap with ATM. Can phosphorylate p53/TP53 and is required for optimal p53/TP53 activation after cellular exposure to genotoxic stress. Its depletion leads to spontaneous DNA damage and increased sensitivity to

ionizing radiation (IR). May activate PRKCI but not PRKCZ.

组织特异性 Widely expressed, with highest level in heart and skeletal muscle. Expressed in placenta, brain,

lung and spleen, but not in liver.

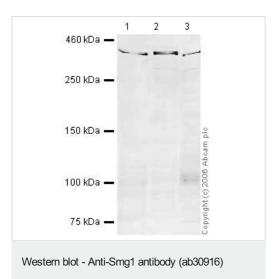
序列相似性 Belongs to the Pl3/Pl4-kinase family.

Contains 1 FAT domain.
Contains 1 FATC domain.
Contains 1 HEAT repeat.
Contains 1 PI3K/P4K domain.

翻译**后修**饰 Autophosphorylated.

细胞定位 Nucleus. Cytoplasm.

图片



All lanes: Anti-Smg1 antibody (ab30916) at 1 µg/ml

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

Lysate at 10 µg

Lane 2 : Jurkat whole cell lysate (ab7899) at 10 μ g Lane 3 : A-431 whole cell lysate (ab7909) at 20 μ g

Secondary

All lanes: IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at

1/15000 dilution

Performed under reducing conditions.

Predicted band size: 340 kDa Observed band size: 340 kDa

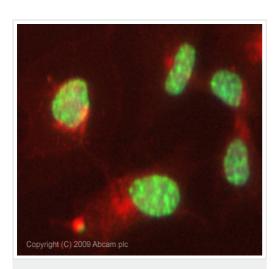
The band at 340kDa is likely to represent isoform 3 of Smg1. The immunogen is present in all three isoforms of Smg1.



Immunocytochemistry/ Immunofluorescence - Anti-Smg1 antibody (ab30916)

This image is courtesy of an Abreview submitted by Dr Kirk McManus

ab30916 (1/200) staining Smg1 by ICC/IF in assynchronous HeLa Cells (green). Cells were countersatined with DAPI (red) in order to show the nucleus. Secondary antibody: Goat anti-Rabbit conjugated to Cy3®. Please refer to abreview for further details.



Immunocytochemistry/ Immunofluorescence - Anti-Smg1 antibody (ab30916)

ICC/IF image of ab30916 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab30916, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 4% PFA fixed (10 min) HeLa, Hek293 and MCF7 cells at 5µg/ml, and in 100% methanol fixed (5 min) HeLa, Hek293, HepG2 and MCF7 cells at 5µg/ml

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors