


Product datasheet

Anti-Smg1 antibody ab30916

★★★★★ 3 Abreviews 4 References 画像数 3

製品の概要

製品名	Anti-Smg1 antibody
製品の詳細	Rabbit polyclonal to Smg1
アプリケーション	適用あり: ICC/IF, WB
種交差性	交差種: Mouse, Human 交差が予測される動物種: Xenopus laevis 
免疫原	Synthetic peptide conjugated to KLH derived from within residues 3600 - C-terminus of Human Smg1. Immunogen の所有権に関して (Peptide available as ab31816 .)
ポジティブ・コントロール	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.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab30916** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
ICC/IF	★★★★☆	

アプリケーション	Abreviews	特記事項
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WB



追加情報

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

WB: Use at a concentration of 1 µg/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.

ターゲット情報

機能

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.

組織特異性

Widely expressed, with highest level in heart and skeletal muscle. Expressed in placenta, brain, lung and spleen, but not in liver.

配列類似性

Belongs to the PI3/PI4-kinase family.

Contains 1 FAT domain.

Contains 1 FATC domain.

Contains 1 HEAT repeat.

Contains 1 PI3K/PI4K domain.

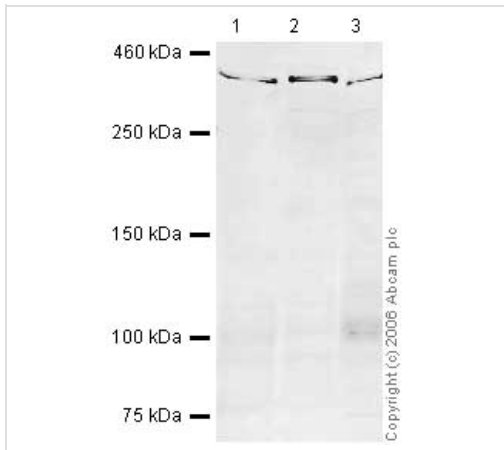
翻訳後修飾

Autophosphorylated.

細胞内局在

Nucleus. Cytoplasm.

画像



Western blot - Smg1 antibody (ab30916)

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 µg

Lane 3 : A431 whole cell lysate (ab7909) at 20 µg

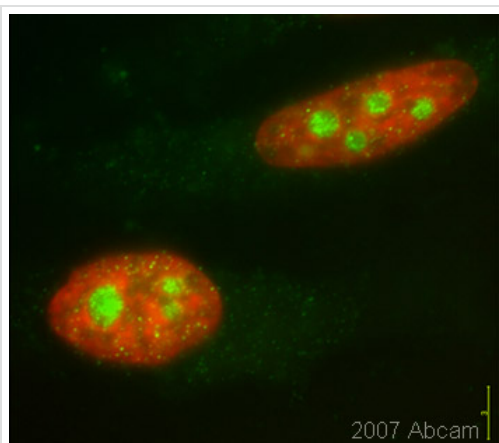
Secondary

IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/15000 dilution

Performed under reducing conditions.

Predicted band size : 340 kDa

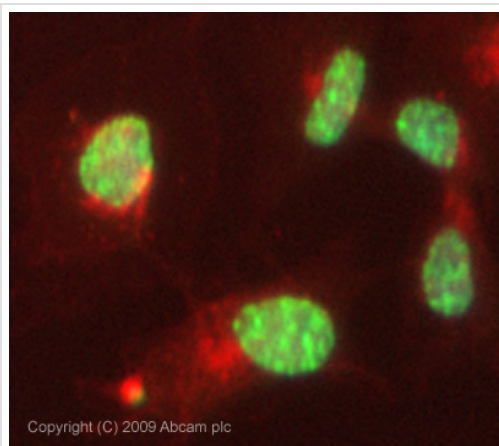
Observed band size : 340 kDa



Immunocytochemistry/ Immunofluorescence - Smg1 antibody (ab30916)

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

ab30916 (1/200) staining Smg1 by ICC/IF in asynchronous HeLa Cells (green). Cells were counterstained 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 - 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

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