abcam

Product datasheet

Anti-G3BP antibody [2F3] ab56574

★★★★★ 9 Abreviews 66 References 5 图像

概述

产品名称	Anti-G3BP抗体[2F3]
描述	**小鼠单克隆抗体**[2F3] to G3BP
宿主	Mouse
经测试应用	**适用于:** WB, IHC-P, Flow Cyt, ICC/IF
种属反应性	**与反应:** Human
免疫原	Recombinant fragment: KPEPVLEETA PEDAQKSSSP APADIAQTVQ EDLRTFSWAS VTSKNLPPSG AVPVTGIPPH VVKVPASQPR PESKPESQIP PQRPQRDQRV , corresponding to amino acids 214-303 of Human G3BP Run BLAST with ExPASy Run BLAST with NCBI
常规说明	This product was changed from ascites to tissue culture supernatant on 22/03/2019. 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.
存储溶液	pH: 7.40 Constituent: 100% PBS
纯度	Protein A purified
纯化说明	Purified from tissue culture supernatant
克隆	单克隆
克隆编号	2F3

同种型	IgG1
轻链类型	kappa

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab56574于以下的经测试应用**

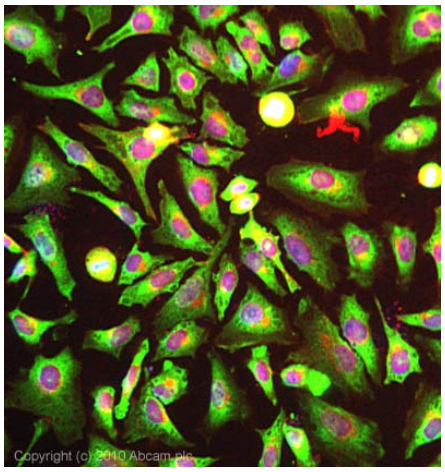
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (3)	Use at an assay dependent concentration. Predicted molecular weight: 52 kDa.
IHC-P	★★★★☆ (1)	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (4)	Use at an assay dependent concentration.

靶标

功能	May be a regulated effector of stress granule assembly. Phosphorylation-dependent sequence-specific endoribonuclease in vitro. Cleaves exclusively between cytosine and adenine and cleaves MYC mRNA preferentially at the 3'-UTR. ATP- and magnesium-dependent helicase. Unwinds preferentially partial DNA and RNA duplexes having a 17 bp annealed portion and either a hanging 3' tail or hanging tails at both 5'- and 3'-ends. Unwinds DNA/DNA, RNA/DNA, and RNA/RNA substrates with comparable efficiency. Acts unidirectionally by moving in the 5' to 3' direction along the bound single-stranded DNA.
组织特异性	Ubiquitous.
序列相似性	Contains 1 NTF2 domain. Contains 1 RRM (RNA recognition motif) domain.
结构域	The NTF2 domain mediates multimerization.
翻译后修饰	Phosphorylated exclusively on serine residues. Hyperphosphorylated in quiescent fibroblasts. Hypophosphorylation leads to a decrease in endoribonuclease activity (By similarity). RASA1-dependent phosphorylation of Ser-149 induces a conformational change that prevents self-association. Dephosphorylation after HRAS activation is required for stress granule assembly. Ser-149 phosphorylation induces partial nuclear localization. Arg-435 is dimethylated, probably to asymmetric dimethylarginine.
细胞定位	Cytoplasm. Cytoplasm > cytosol. Cell membrane. Nucleus. Cytoplasmic in proliferating cells, can be recruited to the plasma membrane in exponentially growing cells (By similarity). Cytosolic and partially nuclear in resting cells. Recruited to stress granules (SGs) upon either arsenite or high temperature treatment. Recruitment to SGs is influenced by HRAS.

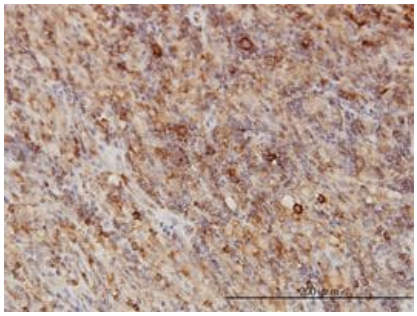
图片



Immunocytochemistry/ Immunofluorescence - Anti-G3BP antibody [2F3] (ab56574)

ICC/IF image of ab56574 stained HeLa cells. The cells were 4% formaldehyde 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 (ab56574, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse 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.

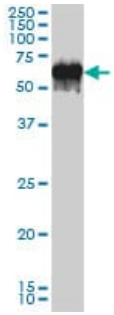
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-G3BP antibody [2F3] (ab56574)

G3BP antibody (ab56574) used in immunohistochemistry at 1ug/ml on formalin fixed and paraffin embedded human lymphoma.

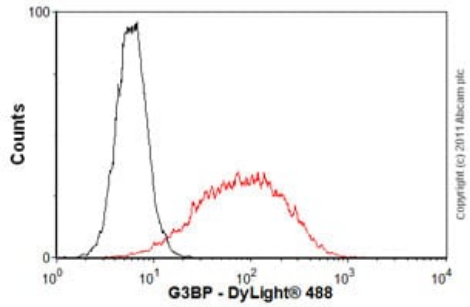
This image was generated using the ascites version of the product.



Western blot - Anti-G3BP antibody [2F3] (ab56574)

G3BP antibody (ab56574) at 1ug/lane + A-431 cell lysate at 25ug/lane.

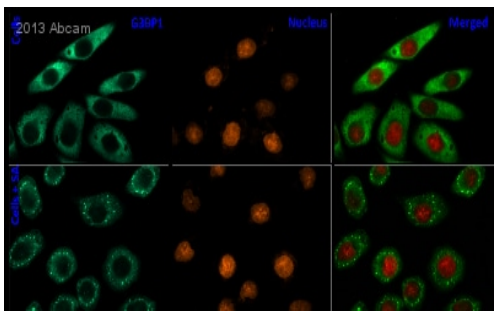
This image was generated using the ascites version of the product.



Flow Cytometry - Anti-G3BP antibody [2F3] (ab56574)

Overlay histogram showing HeLa cells stained with ab56574 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab56574, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized in 0.1% PBS-Tween used under the same conditions.

This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-G3BP antibody [2F3] (ab56574)

This image is courtesy of an anonymous Abreview

ab56574 staining G3BP in Human HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde, permeabilized with Triton X-100 and blocked with 5% BSA for 12 hours at 4°C. Samples were incubated with primary antibody (1/500 in PBS) for 1 hour at 37°C. An Alexa Fluor® 488-conjugated Goat anti-mouse IgG polyclonal (1/1000) was used as the secondary antibody.

Top row - untreated cells. Bottom row - cells treated with sodium arsenite. Left - G3BP, Middle - Nucleus, Right - Merge.

Stress granules are visible in cells treated with sodium arsenite, whereas G3BP is dispersed in the cytoplasm in untreated cells.

This image was generated using the ascites version of the product.

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