abcam

Product datasheet

Anti-G3BP antibody [2F3] ab56574

★★★★★ 9 Abreviews 66 References 画像数 5

製品の概要

製品名 Anti-G3BP antibody [2F3]

製品の詳細 Mouse monoclonal [2F3] to G3BP

由来種 Mouse

アプリケーション 適用あり: WB, IHC-P, Flow Cyt, ICC/IF

種交差性 交差種: 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 S NCBI

特記事項 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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

バッファー pH: 7.40

Constituent: 100% PBS

精製度 Protein A purified

特記事項(精製) Purified from tissue culture supernatant

ポリ/モノ モノクローナル

クローン名 2F3

1

アイソタイプ

lgG1

軽鎖の種類

kappa

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab56574の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	****(3)	Use at an assay dependent concentration. Predicted molecular weight: 52 kDa.
IHC-P	★★★★ <u>(1)</u>	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
ICC/IF	*** <u>*</u>	Use at an assay dependent concentration.

ターゲット情報

機能 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.

組織特異性 Ubiquitous.

配列類似性 Contains 1 NTF2 domain.

Contains 1 RRM (RNA recognition motif) domain.

ドメイン The NTF2 domain mediates multimerization.

翻訳後修飾 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.

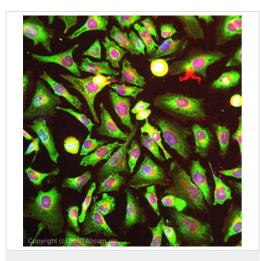
Ser-149 phosphorylation induces partial nuclear localization.

Arg-435 is dimethylated, probably to asymmetric dimethylarginine.

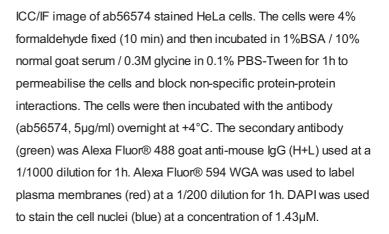
細胞内局在 Cytoplasm. Cytoplasm > cytosol. Cell membrane. Nucleus. Cytoplasmic in proliferating cells, can

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.



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



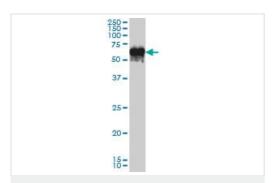
This image was generated using the ascites version of the product.



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

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

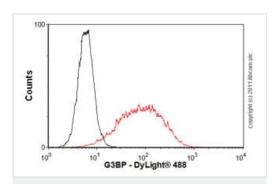
This image was generated using the ascites version of the product.



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

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

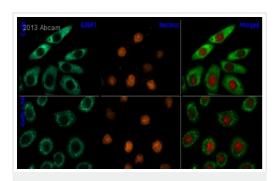
This image was generated using the ascites version of the product.



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/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 2µg/1x10⁶ 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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