abcam

Product datasheet

Anti-GFP antibody [9F9.F9] ab1218

44 Abreviews 395 References 4 图像

概述

产品名称	Anti-GFP抗体[9F9.F9]
描述	**小鼠单克隆抗体**[9F9.F9] to GFP
宿主	Mouse
特异性	This antibody is known to cross react with the wild type (WT), recombinant (rGFP) and enhanced (eGFP) forms.
经测试应用	**适用于:** WB, IHC-Fr, Sandwich ELISA, ICC/IF
种属反应性	**与反应:** Species independent
免疫原	Recombinant fragment within GFP aa 1 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. Full Length Fusion Protein. Derived from the jellyfish Aequorea victoria. Database link: **P42212**
阳性对照	Pure GFP protein, or cells known to overexpress GFP.
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°C. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 0.87% Sodium chloride, 0.42% Potassium phosphate
纯度	Protein A purified
纯化说明	GFP Monoclonal Antibody was prepared from tissue culture supernatant by Protein A affinity

chromatography.

克隆	单克隆
克隆编号	9F9.F9
同种型	IgG1
轻链类型	kappa

应用

The Abpromise guarantee Abpromise™承诺保证使用ab1218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	★★★★★ (23)	1/3000 - 1/30000. (See Abreviews). Recognises the immunogen under native conditions and reduced/denatured conditions.
IHC-Fr	★★★☆☆ (2)	1/1000 - 1/5000. Works also with eYFP.
Sandwich ELISA		Use at an assay dependent concentration.
ICC/IF	★★★★☆ (13)	Use at an assay dependent concentration.

靶标

相关性

Function: Energy-transfer acceptor. Its role is to transduce the blue chemiluminescence of the protein aequorin into green fluorescent light by energy transfer. Fluoresces in vivo upon receiving energy from the Ca^{2+} -activated photoprotein aequorin.

Subunit structure: Monomer.

Tissue specificity: Photocytes.

Post-translational modification: Contains a chromophore consisting of modified amino acid residues. The chromophore is formed by autocatalytic backbone condensation between Ser-65 and Gly-67, and oxidation of Tyr-66 to didehydrotyrosine. Maturation of the chromophore requires nothing other than molecular oxygen.

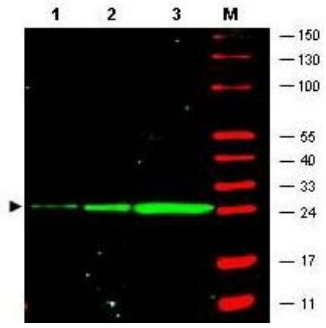
Biotechnological use: Green fluorescent protein has been engineered to produce a vast number of variously colored mutants, fusion proteins, and biosensors. Fluorescent proteins and its mutated allelic forms, blue, cyan and yellow have become a useful and ubiquitous tool for making chimeric proteins, where they function as a fluorescent protein tag. Typically they tolerate N- and C-terminal fusion to a broad variety of proteins. They have been expressed in most known cell types and are used as a noninvasive fluorescent marker in living cells and organisms. They enable a wide range of applications where they have functioned as a cell lineage tracer, reporter of gene expression, or as a measure of protein-protein interactions. Can also be used as a molecular thermometer, allowing accurate temperature measurements in fluids. The measurement process relies on the detection of the blinking of GFP using fluorescence correlation

spectroscopy.

Sequence similarities: Belongs to the GFP family.

Biophysicochemical properties: Absorption: Abs(max)=395 nm
Exhibits a smaller absorbance peak at 470 nm. The fluorescence emission spectrum peaks at 509 nm with a shoulder at 540 nm.

图片



Western blot - Anti-GFP antibody [9F9.F9] (ab1218)

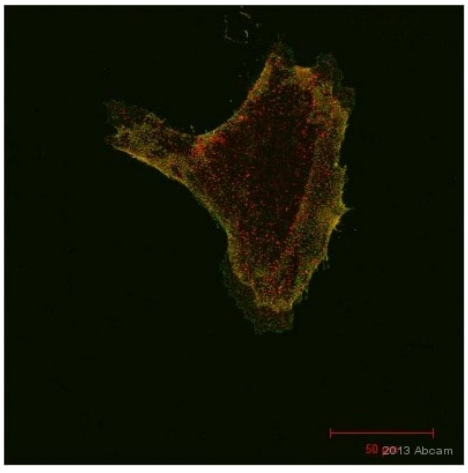
All lanes : Anti-GFP antibody [9F9.F9] (ab1218) at 1 mg/ml (1 hour at room temperature)

Lane 1 : HeLa lysate 50ng with BLOTTO, overnight at 4°C
Lane 2 : HeLa lysate 100ng with BLOTTO, overnight at 4°C
Lane 3 : HeLa lysate 500ng with BLOTTO, overnight at 4°C

Blocking peptides at 5 % per lane.

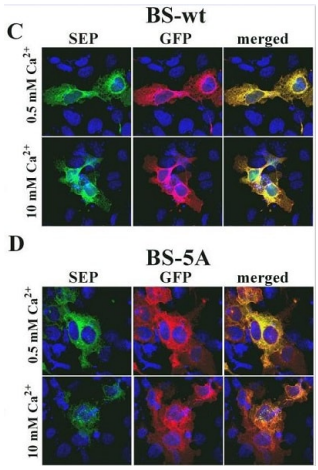
Secondary
All lanes : IRDye® 800 conjugated Goat anti-mouse IgG (H+L), 45 minutes at room temperature at 1/2500 dilution

Additional bands at: 27 kDa. We are unsure as to the identity of these extra bands.



Immunocytochemistry/ Immunofluorescence - Anti-GFP antibody [9F9.F9] (ab1218)
This image is courtesy of an anonymous Abreview

Immunocytochemistry/ Immunofluorescence analysis of HeLa cells labeling GFP with ab1218 at 1/100. Cells were fixed with Formaldehyde and permeabilised with 0.2% Triton100 (permeablized after primary incubation). A good anti-mouse Texas Red® at 1/1000 was used as the secondary antibody.



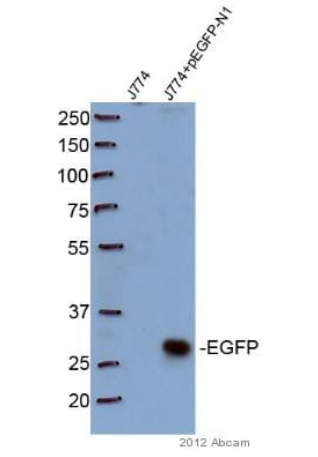
Immunocytochemistry/ Immunofluorescence - Anti-GFP antibody [9F9.F9] (ab1218)

Grant, M.P. et al PLoS One. 2015 Aug 28;10(8):e0136702. doi: 10.1371/journal.pone.0136702. eCollection 2015

TIRFM responses to prolonged stimulation with 10 mM Ca^{2+}

C. Cells expressing BS-wt were stimulated with 0.5 or 10 mM Ca^{2+} for 60 min, 37°C, followed by fixation, permeabilization, and staining with anti-GFP antibody (secondary antibody tagged with Alexa-568). Confocal images of SEP and anti-GFP fluorescence are shown along with the merged image. **D.** Experiment as in **C** for cells expressing BS-5A mutant.

HEK-293 cells were seeded on glass coverslips and transiently transfected with BS-wt or BS-5A cDNAs. Cells were incubated in DMEM containing 0.5 or 10 mM Ca^{2+} for 1 hr at 37°C, 5% CO_2. Following incubation, cells were immediately fixed in 4% paraformaldehyde for 10 min, RT, permeabilized with 0.2% Triton X-100 (10 min), blocked with 5% serum and 0.1% BSA then incubated with monoclonal anti-GFP antibody (Abcam), followed by goat anti-mouse secondary antibody conjugated to Alexa-568.



Western blot - Anti-GFP antibody [9F9.F9] (ab1218)

Image courtesy of an anonymous Abreview

All lanes : Anti-GFP antibody [9F9.F9] (ab1218) at 1/1000 dilution (2 hours at 25°C)

Lane 1 : J774 with Milk, 2 hours at 25°C
Lane 2 : J774+pEGFP-N1 with Milk, 2 hours at 25°C

Lysates/proteins at 20 µg per lane.

Blocking peptides at 5 % per lane.

Secondary
All lanes : Goat anti-mouse HRP at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Additional bands at: 26 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 1 minute

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