

Anti-GFP antibody [EPR14104] ab183734

重组 RabMAb

★★★★★ [23 Abreviews](#) [76 References](#) [11 图像](#)

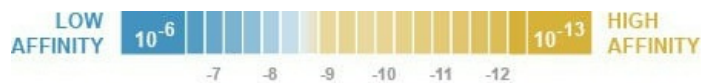
概述

产品名称	Anti-GFP抗体[EPR14104]
描述	兔单克隆抗体[EPR14104] to GFP
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), WB, IHC-P, ICC/IF 不适用于: IP
种属反应性	与反应: Species independent
免疫原	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: GFP transfected 293 cell lysate. IHC-P: GFP transgenic mouse colon, pancreas and liver tissue. Flow Cyt (intra): GFP transfected 293 cells. ICC/IF: GFP transfected NIH3T3 and 293 cells.
常规说明	<p>On the basis of low sequence homology, ab183734 is predicted to show no or limited cross-reactivity to RFP and BFP.</p> <p>For the best results in IHC, please use ab183734 on Formalin/PFA-fixed paraffin-embedded sections with heat mediated antigen retrieval.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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 long term. Avoid freeze / thaw cycle.
解离常数 (K _D)	K _D = 1.11 x 10 ⁻¹¹ M





[Learn more about \$K_D\$](#)

存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR14104
同种型	IgG

应用

The Abpromise guarantee [Abpromise™](#) 承诺保证使用 ab183734 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
Flow Cyt (Intra)		1/50.
WB	★★★★★ (6)	1/10000 - 1/50000. Detects a band of approximately 27 kDa (predicted molecular weight: 27 kDa).
IHC-P	★★★★★ (7)	1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
ICC/IF	★★★★★ (8)	1/500.

应用说明 Is unsuitable for IP.

靶标

相关性	<p>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.</p> <p>Subunit structure: Monomer.</p> <p>Tissue specificity: Photocytes.</p> <p>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 dihydroxytyrosine. Maturation of the chromophore requires nothing other than molecular oxygen.</p> <p>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</p>
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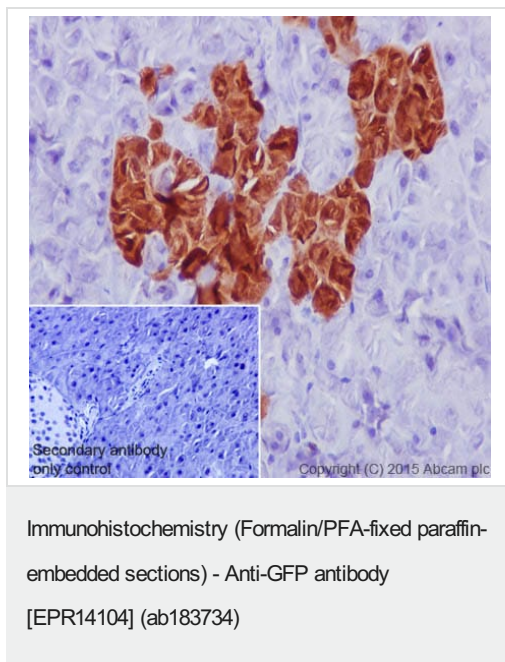
mutated allelic forms, blue, cyan and yellow have become a useful and ubiquitous tool for making chimeric proteins, where they function as a fluorescent protein tag. Typically they tolerate N- and C-terminal fusion to a broad variety of proteins. They have been expressed in most known cell types and 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.

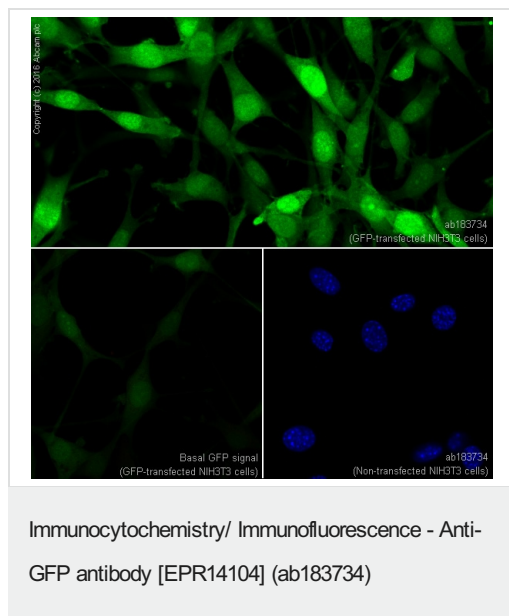
Sequence similarities: Belongs to the GFP family.

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

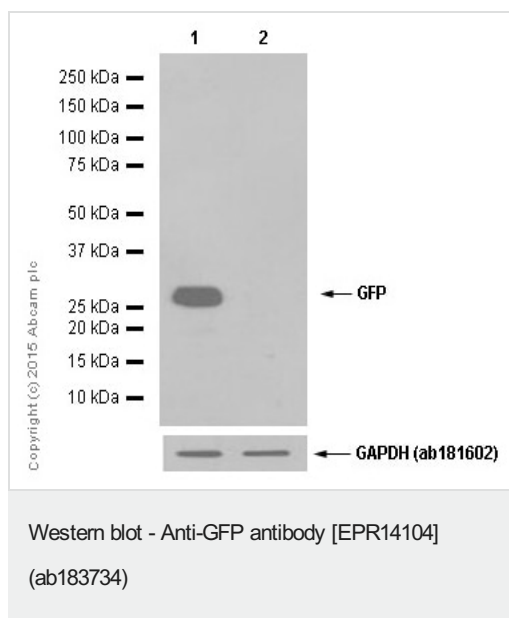




ab183734 staining GFP in GFP-transfected NIH3T3 cells. The cells were fixed with 4% formaldehyde (10min) and then blocked in 1% BSA / 0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated with ab183734 at 1/500 dilution overnight at +4°C followed by incubation with **ab150081**, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488), for 1 hour, at 1µg/ml.

Under identical experimental conditions, when compared to the basal level of GFP expression in transfected NIH3T3 cells, the cells upon which ab183734 was applied gave a stronger signal in the 488 channel, indicating that ab183734 is binding to GFP and therefore eliciting signal amplification.

ab183734 was also applied to non-GFP-transfected NIH3T3 cells, which produced no positive staining, indicating specificity for GFP. Nuclear DNA was labelled with 1.43µM DAPI (blue).



All lanes : Anti-GFP antibody [EPR14104] (ab183734) at 1/10000 dilution (purified)

Lane 1 : GFP transfected 293 cell lysate

Lane 2 : Non-transfected 293 cell lysate

Lysates/proteins at 10 µg per lane.

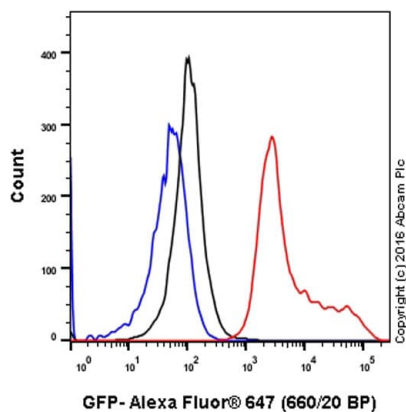
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 27 kDa

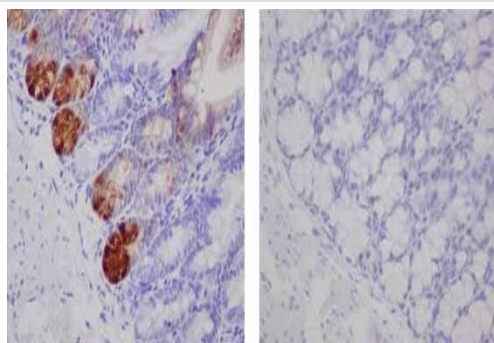
Observed band size: 25 kDa

Blocking and dilution buffer: 5% NFDM /TBST.



Flow Cytometry (Intracellular) - Anti-GFP antibody
[EPR14104] (ab183734)

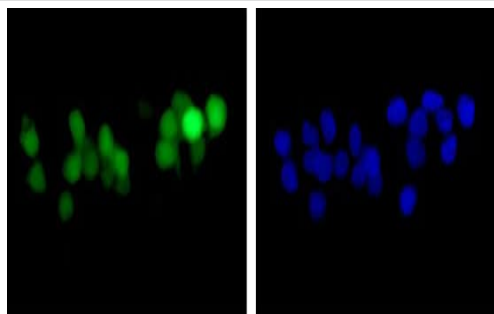
Intracellular Flow Cytometry analysis of 293T (human embryonic kidney) transfected with human TNFRSF9 cells labeling GFP with purified ab183734 at 1/50 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 647) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFP antibody
[EPR14104] (ab183734)

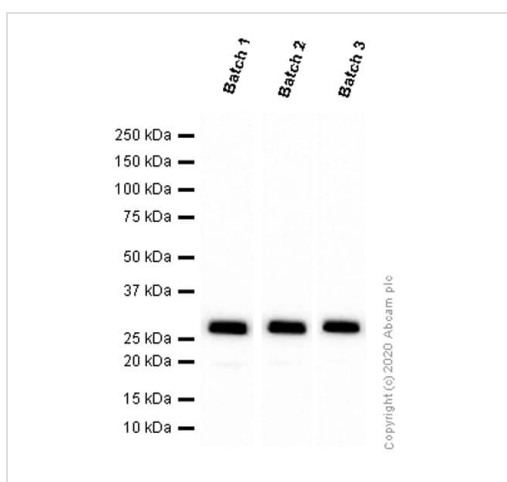
Immunohistochemical analysis of paraffin-embedded GFP transgenic mouse colon tissue (left) and normal mouse colon tissue (right) labeling GFP with unpurified ab183734 at 1/250 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counterstained with Hematoxylin.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



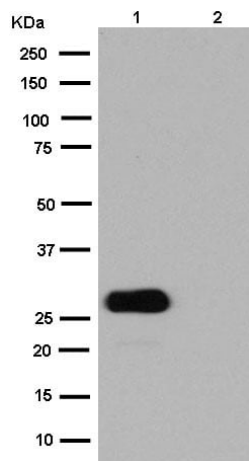
Immunocytochemistry/ Immunofluorescence - Anti-GFP antibody [EPR14104] (ab183734)

Immunofluorescent analysis of 4% paraformaldehyde-fixed GFP transfected 293 cells labeling GFP with unpurified ab183734 at 1/500 dilution, followed by Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody at 1/200 dilution (green). Counterstained with Dapi (blue)



Western blot - Anti-GFP antibody [EPR14104] (ab183734)

Different batches of ab183734 were tested on GFP transfected HEK-293 (Human embryonic kidney epithelial cell) lysate at 0.004 µg/ml. 15 µg of lysate was loaded in each lane. Bands observed at 27 kDa.



Western blot - Anti-GFP antibody [EPR14104]
(ab183734)

All lanes : Anti-GFP antibody [EPR14104] (ab183734) at 1/10000 dilution (unpurified)

Lane 1 : GFP transfected 293 cell lysate

Lane 2 : Non-transfected 293 cell lysate

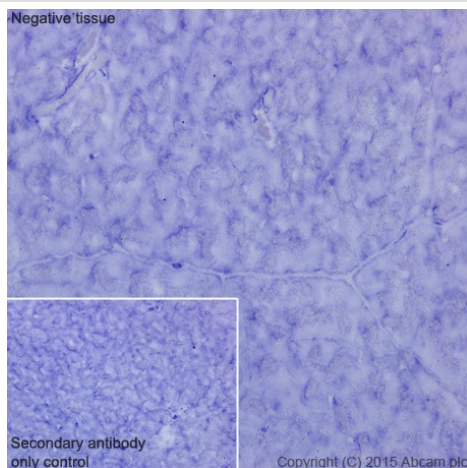
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

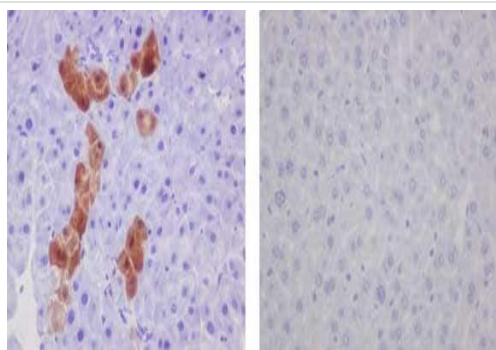
Predicted band size: 27 kDa

Observed band size: 27 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFP antibody [EPR14104] (ab183734)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse pancreas tissue (negative control) labelling GFP with purified ab183734 at a dilution of 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFP antibody [EPR14104] (ab183734)

Immunohistochemical analysis of paraffin-embedded GFP transgenic mouse liver tissue (left) and normal mouse liver tissue (right) labeling GFP with unpurified ab183734 at 1/250 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counterstained with Hematoxylin.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Why choose a recombinant antibody?



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Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-GFP antibody [EPR14104] (ab183734)

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