

Product datasheet

Anti-GFP antibody [EPR14104-89] - BSA and Azide free ab236117

Recombinant RabMAb

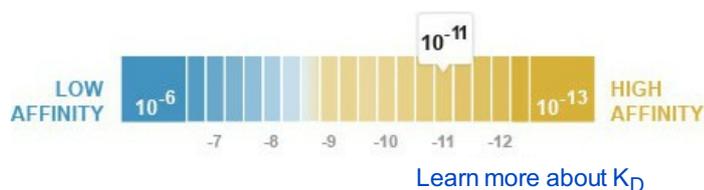
4 Images

Overview

Product name	Anti-GFP antibody [EPR14104-89] - BSA and Azide free
Description	Rabbit monoclonal [EPR14104-89] to GFP - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IHC-P, ICC/IF, Flow Cyt, WB
Species reactivity	Reacts with: Species independent
Immunogen	Full length protein corresponding to Aequorea victoria GFP aa 1 to the C-terminus. Database link: P42212 <div style="display: flex; justify-content: space-around;">  Run BLAST with  Run BLAST with </div>
Positive control	IHC-P: GFP transgenic mouse colon tissue.
General notes	<p>The formulation and the concentration of this product is compatible for metal-conjugation for mass cytometry (CyTOF®).</p> <p>ab236117 is a PBS-only buffer format of ab183735. Please refer to ab183735 for recommended dilutions, protocols, and image data.</p> <p>On the basis of low sequence homology, ab183735 is predicted to show no or limited cross-reactivity to RFP, YFP, BFP, and CFP.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</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> <p>This product is a recombinant rabbit monoclonal antibody.</p>

Properties

Form	Liquid
Storage instructions	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.

Dissociation constant (K_D)K_D = 8.82 x 10⁻¹¹ M**Storage buffer**

Constituent: PBS

Purity

Affinity purified

Clonality

Monoclonal

Clone number

EPR14104-89

Isotype

IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab236117** in the following tested applications.

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

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 27 kDa (predicted molecular weight: 27 kDa).

Target**Relevance**

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 Ca²⁺-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

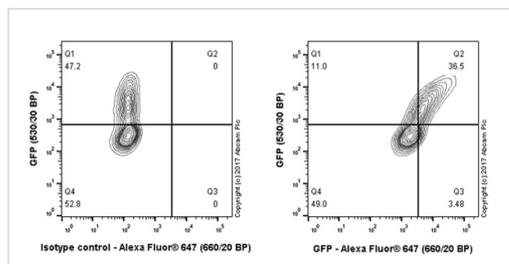
chimeric proteins, where they function as a fluorescent protein tag. Typically they tolerate N- and C-terminal fusion to a broad variety of proteins. They have been expressed in most known cell types and are used as a noninvasive fluorescent marker in living cells and organisms. They enable a wide range 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.

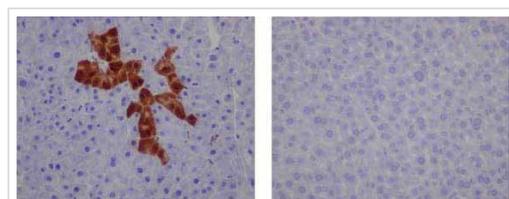
Images



Flow Cytometry - Anti-GFP antibody [EPR14104-89]
- BSA and Azide free (ab236117)

Flow Cytometry analysis of 293T (Human epithelial cell line from embryonic kidney) transfected with GFP cells labeling GFP with unpurified [ab183735](#) at 1/200 dilution (10ug/ml, Right panel). 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 (Left panel) was used as the isotype control.

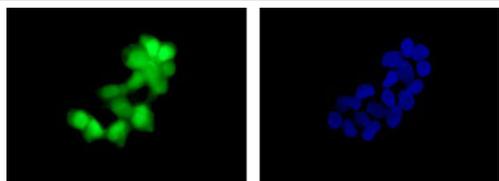
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab183735](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFP antibody [EPR14104-89] - BSA and Azide free (ab236117)

Immunohistochemical analysis of paraffin-embedded GFP transgenic mouse liver tissue (left) and normal mouse liver tissue (right) labeling GFP with [ab183735](#) at 1/250 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.

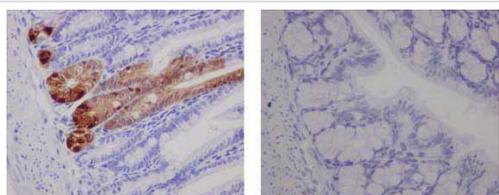
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab183735](#)).



Immunocytochemistry/ Immunofluorescence - Anti-GFP antibody [EPR14104-89] - BSA and Azide free (ab236117)

Immunofluorescent analysis of 4% paraformaldehyde-fixed GFP transfected 293 cells labeling GFP with [ab183735](#) at 1/500 dilution, followed by Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody at 1/200 dilution (green). Counter stained with Dapi (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab183735](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFP antibody [EPR14104-89] - BSA and Azide free (ab236117)

Immunohistochemical analysis of paraffin-embedded GFP transgenic mouse colon tissue (left) and normal mouse colon tissue (right) labeling GFP with [ab183735](#) at 1/250 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab183735](#)).

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