abcam

Product datasheet

Biotin Anti-GFP antibody [LGB-1] ab42562

2 References 1 Image

Overview

Product name	Biotin Anti-GFP antibody [LGB-1]
Description	Biotin Mouse monoclonal [LGB-1] to GFP
Host species	Mouse
Conjugation	Biotin
Specificity	This antibody recognizes all forms of GFP from Aquorea victoria (i.e. GFP, EGFP, YFP and CFP).
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Species independent
Immunogen	Recombinant full length protein corresponding to Escherichia coli GFP. Database link: **P42212**
Positive control	Pure GFP protein, or cells known to overexpress GFP.
General notes	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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.1% Sodium azide Constituents: PBS, 50% Glycerol
Purity	Protein A purified
Clonality	Monoclonal
Clone number	LGB-1
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab42562 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
WB		Use a concentration of 0.5 µg/ml. 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 Ca^{2+} -activated photoprotein aequorin.

Subunit structure: Monomer.

Tissue specificity: Photocytes.

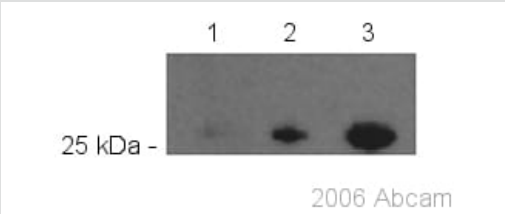
Post-translational modification: Contains a chromophore consisting of modified amino acid residues. The chromophore is formed by autocatalytic backbone condensation between Ser-65 and Gly-67, and oxidation of Tyr-66 to didehydrotyrosine. Maturation of the chromophore requires nothing other than molecular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

Images



Western blot - Biotin Anti-GFP antibody [LGB-1] (ab42562)

All lanes : Biotin Anti-GFP antibody [LGB-1] (ab42562) at 0.5 µg/ml

Lane 1 : 5ng GFP
Lane 2 : 10ng GFP
Lane 3 : 25ng GFP

Secondary
All lanes : Neutravidin-HRP in TBST-1%BSA at 1/6000 dilution

Predicted band size: 27 kDa
Observed band size: 27 kDa

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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