

Product datasheet

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

[1 References](#) [1 Image](#)

Overview

Product name	Anti-GFP antibody [LGB-1] (Biotin)
Description	Mouse monoclonal [LGB-1] to GFP (Biotin)
Host species	Mouse
Conjugation	Biotin
Specificity	This antibody recognizes all forms of GFP from <i>Aequorea victoria</i> (i.e. GFP, EGFP, YFP and CFP).
Tested applications	Suitable for: WB
Immunogen	Recombinant full length protein corresponding to <i>Escherichia coli</i> GFP. Database link: P42212

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: 50% Glycerol, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	LGB-1
Isotype	IgG1

Applications

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.

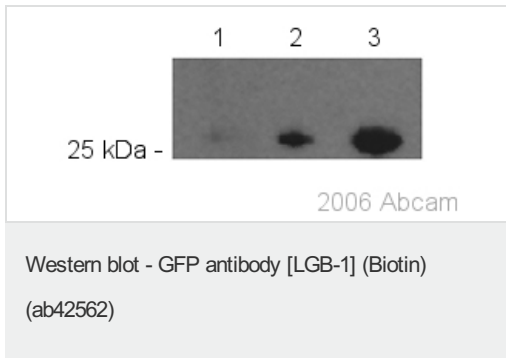
Post-translational modification: Contains a chromophore consisting of modified amino acid residues. The chromophore is formed by autocatalytic backbone condensation between Ser-65 and Gly-67, and oxidation of Tyr-66 to didehydrotyrosine. Maturation of the chromophore requires nothing other than molecular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



All lanes : Anti-GFP antibody [LGB-1] (Biotin)
(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

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