

## Product datasheet

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

[1 References](#)   [1 Image](#)

### Overview

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

### Properties

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

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### 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  $\text{Ca}^{2+}$ -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.

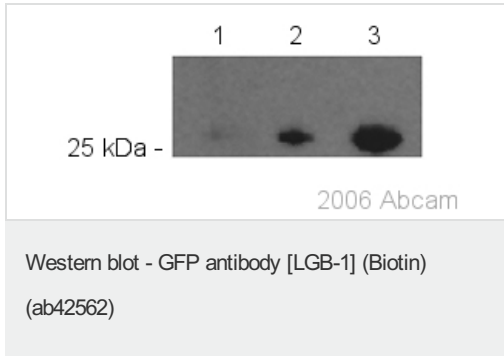
**Biotechnological use:** Green fluorescent protein has been engineered to produce a vast number of variously colored mutants, fusion proteins, and biosensors. Fluorescent proteins and its mutated allelic forms, blue, cyan and yellow have become a useful and ubiquitous tool for making chimeric proteins, 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:  $\text{Abs}(\text{max})=395 \text{ nm}$   
Exhibits a smaller absorbance peak at 470 nm. The fluorescence emission spectrum peaks at 509 nm with a shoulder at 540 nm.

## Images

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**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**

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 AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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