

## Product datasheet

# Anti-GFP antibody ab5449

★★★★★ 1 Abreviews 8 References 2 Images

### Overview

<b>Product name</b>	Anti-GFP antibody
<b>Description</b>	Goat polyclonal to GFP
<b>Host species</b>	Goat
<b>Specificity</b>	Reactive against all variants of <i>Aequorea victoria</i> GFP such as S65T-GFP, RS-GFP, YFP and EGFP.
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Species independent
<b>Immunogen</b>	This information is considered to be commercially sensitive.
<b>General notes</b>	Protein A will not bind goat IgG, so use alternates (eg. protein G) in IP with this antibody. This antibody is available in an affinity purified form as <a href="#">ab5450</a> .

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide
<b>Purity</b>	Whole antiserum
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab5449** 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	★★★★★	1/5000 - 1/20000.
IP		Use 0.5µl for 10 <sup>6</sup> cells.

Application	Abreviews	Notes
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## 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 Ca<sup>2+</sup>-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.

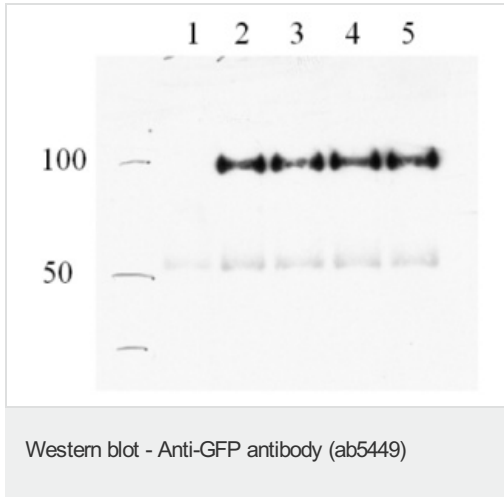
**Biotechnological use:** Green fluorescent protein has been engineered to produce a vast number of variously colored mutants, fusion proteins, and biosensors. Fluorescent proteins and its mutated allelic forms, blue, cyan and yellow have become a useful and ubiquitous tool for making chimeric proteins, 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.

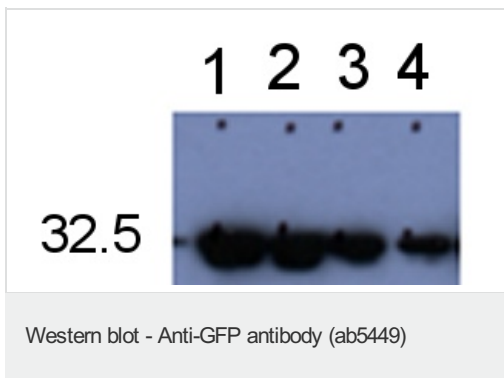
## Images

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Lane 1 : parental YTS cells (negative control)  
 Lanes 2-5 : YTS cells transfected with KIR-EGFP (mw 88 kD)  
 KIR-EGFP IP's with Goat polyclonal to GFP (ab5449) using 0.1 ul for  $2 \times 10^6$  cells. KIR-EGFP detected with a mouse monoclonal to KIR receptor (Borszcz et al EGI 2003, 33: 1084).

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5 ng GFP on PVDF membrane QC. Goat polyclonal to GFP (ab5449) used at dilutions of:  
 Lane 1 : 1/2500  
 Lane 2 : 1/5000  
 Lane 3 : 1/10,000  
 Lane 4 : 1/20,000

5 ng GFP on PVDF membrane QC. Goat polyclonal to GFP (ab5449) used at dilutions of: Lane 1 : 1/2500 Lane 2 : 1/5000 Lane 3 : 1/10,000 Lane 4 : 1/20,000

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