

### Sepharose Anti-GFP antibody ab69314

★★★★★ [1 Abreviews](#) [27 References](#) [1 Image](#)

#### Overview

<b>Product name</b>	Sepharose Anti-GFP antibody
<b>Description</b>	Sepharose Rabbit polyclonal to GFP
<b>Host species</b>	Rabbit
<b>Conjugation</b>	Sepharose
<b>Specificity</b>	This product is a suspension of affinity purified anti-GFP antibody ( <a href="#">ab6556</a> ) covalently linked to sepharose beads. It is reactive against all variants of <i>Aequorea victoria</i> GFP such as S65T-GFP, RS-GFP, YFP, CFP, RFP, and EGFP. The unit sold contains 25µg of affinity purified rabbit anti-GFP IgG cross-linked to 125 µl sepharose beads in a total volume of 250 µl buffer. The product is supplied as a 50% slurry to facilitate pipetting. Pipetting the slurry is facilitated when pipet tips are blunted by cutting 3-5mm off from the tip.
<b>Tested applications</b>	<b>Suitable for:</b> IP
<b>Species reactivity</b>	<b>Reacts with:</b> Species independent
<b>Immunogen</b>	Recombinant full length protein corresponding to GFP. Database link: <a href="#">P42212</a>
<b>Positive control</b>	Pure GFP protein, or cells known to overexpress GFP.
<b>General notes</b>	<p>This product should be kept refrigerated at all times whilst in short term storage. Using sterilised equipment will reduce the risk of bacterial contamination.</p> <p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide Constituent: PBS

<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	This antibody is an affinity purified rabbit anti-GFP antibody purified on an affinity chromatography column made with highly purified recombinant GFP.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab69314 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
IP	★★★★★ (1)	Use at an assay dependent concentration. We routinely recommend using 20 µL of slurry per IP, which corresponds to 2 µg of IgG cross-linked to beads. this results in a clearly visible 10 µL bead pellet upon centrifugation. Unconjugated version: <a href="#">ab6556</a> . FITC conjugated version: <a href="#">ab66180</a> . Biotin conjugated version: <a href="#">ab69313</a> .

## 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<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 dihydroxytyrosine. Maturation of the chromophore requires nothing other than molecular oxygen.

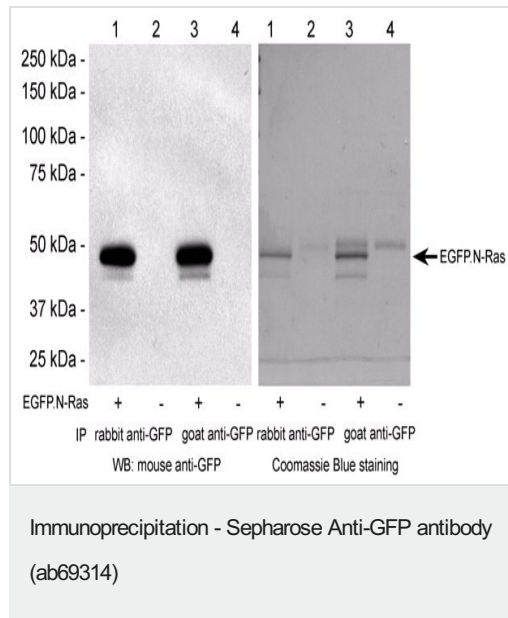
**Biotechnological use:** Green fluorescent protein has been engineered to produce a vast number of variously colored mutants, fusion proteins, and biosensors. Fluorescent proteins and its mutated allelic forms, blue, cyan and yellow have become a useful and ubiquitous tool for making chimeric proteins,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



Lane 1 & 3: IP from COS 7 cells transfected with EGFP.N-Ras (48 kDa)

Lane 2 & 4: IP from untransfected COS 7 cells

Lane 1 & 2: IP using 15 ul of rabbit anti-GFP conjugated to sepharose beads (0.5 mg IgG per ml of beads)

Lane 3 & 4: IP using 15 ul of goat anti-GFP conjugated to sepharose beads (1 mg IgG per ml of beads)

Immunoprecipitation: COS 7 cell lysates containing 100 ug of total protein in 200 ul of 0.1% SDS-RIPA buffer with addition of complete protease inhibitor were used for each immunoprecipitation. Cell lysates were incubated with anti-GFP sepharose beads for 2 hours at 4°C with rocking. Beads were washed. Proteins were eluted with 1% SDS 50 mM HEPES (pH 7.4) at 80°C (15 min). Half of the IP sample was loaded on each lane of 10 % SDS PAGE gel and gel was processed for Western blotting/ECL.

Western blot: Primary antibody: monoclonal mouse anti-GFP (**ab291**) at 0.2 ug/ml in 5% non-fat milk/TBS-T; 1 hour incubation at room

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

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