# abcam

# Product datasheet

# Anti-GFP antibody ab6556

★★★★★ 61 Abreviews 1204 References 3 图像

#### 概述

产品名称 Anti-GFP抗体

描述 兔多克隆抗体to GFP

宿主 Rabbit

特异性 GFP antibody (ab6556) is reactive against all variants of Aequorea victoria GFP such as

S65T-GFP, RS-GFP, YFP, CFP, RFP and EGFP.

经测试应用 适用于: IHC-P, Electron Microscopy, ICC, IP, Flow Cyt, IHC-Fr, WB

种属反应性 与反应: Species independent

免疫原 Recombinant full length protein corresponding to GFP.

Database link: P42212

常规说明 Please note that a mistake was made in reference 4 (Mesaeli et.al., J. Cell. Biol. 1999 Mar

8;144(5):857-68). The antibody used for immunohistochemistry on paraformaldehyde fixed tissues was the crude serum version of this antibody (Abcam **ab290**) and not Clontech's monoclonal as stated. This product is supplied in 25% glycerol. During freezeing and thawing some phase separation might occur - Please ensure that the solution is mixed thoroughly but

GENTLY before use.

This antibody (ab6556) is the purified version of our best-selling rabbit polyclonal to GFP (<u>ab290</u>). It has been developed specifically for use in applications requiring a high titre and specificity with minimum background such as immuno-electron microscopy.

This anti-GFP antibody recognizes the enhanced form of GFP as well.

Abcam recommended secondaries - Goat Anti-Rabbit HRP (<u>ab205718</u>) and Goat Anti-Rabbit Alexa Fluor® 488 (<u>ab150077</u>). Or search our wide range of secondary antibodies for use with your experiment.

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

性能

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形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Constituents: 0.79% Tris HCI, 25% Glycerol

纯**度** Immunogen affinity purified

纯**化说明** This antibody is an affinity purified rabbit anti-GFP antibody purified on an affinity chromatography

column made with highly purified recombinant GFP.

**克隆** 多克隆

**同种型** IgG

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab6556于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	<b>★★★★★ (11)</b>	Use at an assay dependent concentration.
Electron Microscopy		1/5000.
ICC	**** <u>(1)</u>	1/2000.
IP	<b>★★★★</b> <u>(3)</u>	Use at an assay dependent concentration.
Flow Cyt	**** <u>(1)</u>	Use at an assay dependent concentration.
IHC-Fr	★★★☆☆ (4)	Use at an assay dependent concentration.
WB	<b>★★★★★</b> (27)	Use at an assay dependent concentration. Predicted molecular weight: 27 kDa.

#### 靶标

#### 相关性

**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.

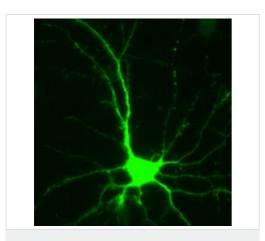
**Post-translational modification:** Contains a chromophore consisting of modified amino acid residues. The chromophore is formed by autocatalytic backbone condensation between Ser-65 and Gly-67, and oxidation of Tyr-66 to didehydrotyrosine. Maturation of the chromophore requires nothing other than molecular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

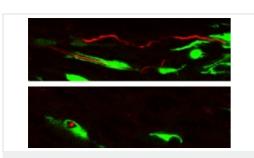
**Biophysicochemical properties:** Absorption: Abs(max)=395 nm Exhibits a smaller absorbance peak at 470 nm. The fluorescence emission spectrum peaks at 509 nm with a shoulder at 540 nm.

#### 图片



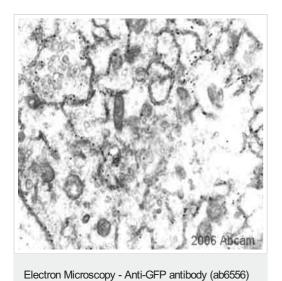
Immunocytochemistry - Anti-GFP antibody (ab6556)

This image shows a single primary hippocampal neuron from a primary culture overexpressing GFP stained with ab6556 at a dilution of 1/2000. This picture was kindly supplied as part of the review submitted by one of our customers.



Immunocytochemistry - Anti-GFP antibody (ab6556)

This image shows IF using GFP-expressing glial cells (green) transplanted into lesioned rat spinal cord. This was detected using ab6556 anti-GFP antibody and a FITC conjugated secondary antibody. Axons are labelled red by an antibody to neurofilament-200 and a rhodamine secondary. ab6556 reveals the morphology of the transplanted cells to such an extent that their close interactions with axons are obvious. The top picture shows an optical section from a confocal microscope scan showing how a GFP cell wraps around a branched axon travelling longitudinally. The bottom picture consists of an optical section from another confocal scan showing a GFP cell enveloping an axon in the transverse plane. Review by Andrew Toft submitted 19 May 2004.



Specific labeling of a Trk-GFP fusion protein being synthesized on ER in sympathetic neurons infected with an adenovirus carrying the construct. The gold is associated with the ER membranes. This was done using a 1/5000 dilution of affinity purified antibody (ab6556). The tissue section was fixed and embedded using durcupan resin.

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

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