abcam

Product datasheet

Anti-GFP antibody [E385] (HRP) ab190584

Recombinant RabMAb

★★★★★ 1 Abreviews 2 References 2 Images

Overview

Product name	Anti-GFP antibody [E385] (HRP)
Description	Rabbit monoclonal [E385] to GFP (HRP)
Host species	Rabbit
Conjugation	HRP
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Species independent
Immunogen	Synthetic peptide within Aequorea victoria GFP aa 1-100 (N terminal). The exact sequence is proprietary. Database link: P42212
Positive control	WB: HEK 293 over-expressing GFP lysate and Active A.victoria GFP full length recombinant protein.
General notes	Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.1% Proclin Constituents: 30% Glycerol, 1% BSA, PBS
Purity	Affinity purified
Clonality	Monoclonal
Clone number	E385
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab190584** 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	★★★★★	1/10000. 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.

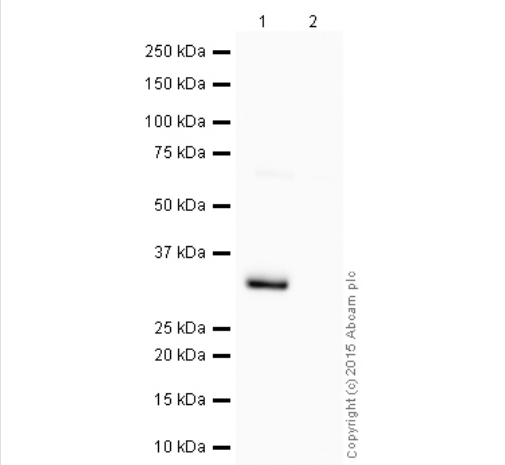
Post-translational modification: Contains a chromophore consisting of modified amino acid residues. The chromophore is formed by autocatalytic backbone condensation between Ser-65 and Gly-67, and oxidation of Tyr-66 to didehydrotyrosine. Maturation of the chromophore requires nothing other than molecular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



Western blot - Anti-GFP antibody [E385] (HRP) (ab190584)

All lanes : Anti-GFP antibody [E385] (HRP) (ab190584) at 1/10000 dilution

Lane 1 : HEK 293 over-expressing GFP
Lane 2 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 5 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 27 kDa
Observed band size: 27 kDa

Exposure time: 30 seconds

This blot was produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab190485 overnight at 4°C. Antibody binding was visualised using ECL development solution ab133406.

Western blot - Anti-GFP antibody [E385] (HRP) (ab190584)

All lanes : Anti-GFP antibody [E385] (HRP) (ab190584) at 1/10000 dilution

Lane 1 : Recombinant A. victoria GFP protein (ab84191)
Lane 2 : Recombinant RFP protein (ab51993)

Lysates/proteins at 0.1 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 27 kDa
Observed band size: 27 kDa

Exposure time: 10 seconds

This blot was produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab190584 overnight at 4°C. Antibody binding was visualised using ECL development solution ab133406.

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