

Datasheet for ABIN100089
anti-GFP antibody (HRP)



[Go to Product page](#)

2 Images

11 Publications

Overview

Quantity:	1 mg
Target:	GFP
Reactivity:	Aequorea victoria
Host:	Goat
Clonality:	Polyclonal
Conjugate:	This GFP antibody is conjugated to HRP
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Purpose:	GFP Antibody Peroxidase Conjugate
Immunogen:	Immunogen: Recombinant Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish Aequorea victoria. Immunogen Type: Recombinant Protein
Isotype:	IgG
Cross-Reactivity (Details):	Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, anti-Peroxidase and purified and partially purified Green Fluorescent Protein (Aequorea victoria).
Characteristics:	Synonyms: goat anti-GFP Antibody peroxidase Conjugation, HRP conjugated goat anti-GFP antibody, Green Fluorescent Protein, GFP antibody, Green Fluorescent Protein antibody, EGFP, enhanced Green Fluorescent Protein, Aequorea victoria, Jellyfish
Purification:	Anti-GFP antibody was prepared from monospecific antiserum by immunoaffinity

Product Details

chromatography using Green Fluorescent Protein (*Aequorea victoria*) coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities.

Target Details

Target:	GFP
Alternative Name:	GFP (GFP Products)
Background:	<p>Background: HRP Anti-GFP is ideal for western blotting, ELISA and Immunohistochemistry. Green fluorescent protein is a 27 kDa protein produced from the jellyfish <i>Aequorea victoria</i>, which emits green light (emission peak at a wavelength of 509nm) when excited by blue light. GFP is an important tool in cell biology research. GFP is widely used enabling researchers to visualize and localize GFP-tagged proteins within living cells without the need for chemical staining.</p>
UniProt:	P42212

Application Details

Application Notes:	<p>Immunohistochemistry Dilution: 1:500 - 1:2,000</p> <p>Application Note: Polyclonal anti-GFP is designed to detect GFP and its variants. Anti-GFP Peroxidase conjugated antibody has been tested by ELISA to detect GFP by ELISA (sandwich or capture) for the direct binding of antigen and recognizes wild type, recombinant and enhanced forms of GFP and by western blot. Biotin conjugated polyclonal anti-GFP used in a sandwich ELISA is well suited to titrate GFP in solution using this antibody in combination with Rockland's monoclonal anti-GFP (600-301-215) using either form of the antibody as the capture or detection antibody. However, use the monoclonal form only for the detection of wild type or recombinant GFP as this form does not sufficiently detect 'enhanced' GFP. The detection antibody is typically conjugated to biotin and subsequently reacted with streptavidin conjugated HRP (code # S000-03). Fluorochrome conjugated polyclonal anti-GFP can be used to detect GFP by immunofluorescence microscopy in prokaryotic (<i>E.coli</i>) and eukaryotic (CHO cells) expression systems and can detect GFP containing inserts. Significant amplification of signal is achieved using fluorochrome conjugated polyclonal anti-GFP relative to the fluorescence of GFP alone. For immunoblotting use either alkaline phosphatase or peroxidase conjugated polyclonal anti-GFP to detect GFP or GFP containing proteins on western blots. Optimal titers for applications should be determined by the researcher.</p> <p>Western Blot Dilution: 1:2,000 - 1:5,000</p> <p>ELISA Dilution: 1:10,000 - 1:50,000</p>
--------------------	--

Application Details

Other: User Optimized

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Reconstitution Volume: 1.0 mL
Reconstitution Buffer: Restore with deionized water (or equivalent)

Concentration: 1.0 mg/mL

Buffer: Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative: 0.01 % (w/v) Gentamicin Sulfate. Do NOT add Sodium Azide!

Preservative: Gentamicin sulfate

Precaution of Use: This product contains Gentamicin sulfate: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: Store GFP antibody at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiry Date: 12 months

Publications

Product cited in: Hennigan, Fletcher, Guard, Ratner: "Proximity biotinylation identifies a set of conformation-specific interactions between Merlin and cell junction proteins." in: **Science signaling**, Vol. 12, Issue 578, (2020) ([PubMed](#)).

Lim, Chang, Huh: "Phosphoregulation of Rad51/Rad52 by CDK1 functions as a molecular switch for cell cycle-specific activation of homologous recombination." in: **Science advances**, Vol. 6, Issue 6, pp. eaay2669, (2020) ([PubMed](#)).

Bisgrove, Su, Yost: "Maternal Gdf3 is an obligatory cofactor in Nodal signaling for embryonic axis formation in zebrafish." in: **eLife**, Vol. 6, (2018) ([PubMed](#)).

Botto, Totonchy, Gustin, Moses: "Kaposi Sarcoma Herpesvirus Induces HO-1 during De Novo Infection of Endothelial Cells via Viral miRNA-Dependent and -Independent Mechanisms." in: **mBio**, Vol. 6, Issue 3, pp. e00668, (2016) ([PubMed](#)).

Fahrenkamp, de Leur, Küster, Chatain, Müller-Newen: "Src family kinases interfere with dimerization of STAT5A through a phosphotyrosine-SH2 domain interaction." in: **Cell communication and signaling : CCS**, Vol. 13, pp. 10, (2015) ([PubMed](#)).

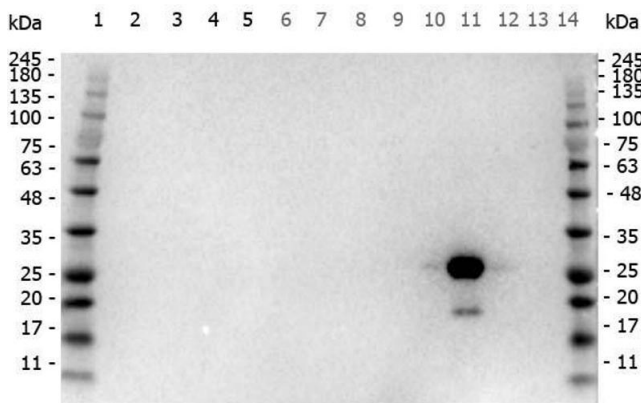
There are more publications referencing this product on: [Product page](#)

Images



Western Blotting

Image 1. Western Blot of Anti-GFP Antibody Peroxidase Conjugate. Lane 1: 50ng of GFP. Lane 2: none. Primary antibody: none. Secondary antibody: Anti-GFP Antibody Peroxidase Conjugate secondary antibody was used at 1:1000 for 45 min at RT. Block: 1% BSA-TTBS , diluted to 1X) 30 min at 20°C. Predicted/Observed size: 28 kDa for GFP. Other band(s): none



Western Blotting

Image 2. Western Blot of Goat anti-GFP antibody Peroxidase conjugated. Marker: Opal Pre-stained ladder . Lane 2: HEK293 lysate . Lane 3: HeLa Lysate . Lane 4: CHO/K1 Lysate . Lane 5: C2C12 Lysate. Lane 6: NIH/3T3 Lysate . Lane 7: Mouse Embryonic Fibroblast Lysate . Lane 8: E-coli HCP Control . Lane 9: 2 Epitope MBP Tag Marker Lysate . Lane 10: Recombinant Red Fluorescent Protein . Lane 11: Green Fluorescent Protein . Lane 12: Glutathione-S-Transferase Protein. Lane 13: Maltose Binding Protein . Marker: Opal Pre-stained ladder Load: 10 µg of lysate or 50ng of purified protein per lane. Primary antibody: GFP antibody at 1:1,00 overnight at 4C. Secondary antibody:

Peroxidase Goat secondary antibody at 1:40,000 for 60 min at RT. Blocking Buffer: BlockOut for 30 min at RT. Predicted/Observed size: 28 kDa for GFP.