

# GFP Polyclonal Antibody, Alexa Fluor™ 647

## Product Details

Size	100 µL
Species Reactivity	Tag
Published Species	Tag
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Alexa Fluor™ 647
Excitation/Emission Max	650/671 nm
Immunogen	The GFP was isolated directly from the jellyfish Aequorea victoria.
Form	Liquid
Concentration	2 mg/mL
Purification	IgG fraction
Storage buffer	PBS, pH 7.5
Contains	5mM sodium azide
Storage conditions	4° C, store in dark
RRID	AB_162553

Applications	Tested Dilution	Publications
Western Blot (WB)	1:2,000	1 Publication
Immunohistochemistry (IHC)	Assay-dependent	12 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	2 Publications
Immunocytochemistry (ICC/IF)	1-10 µg/mL	12 Publications
Flow Cytometry (Flow)	-	1 Publication
ELISA (ELISA)	Assay-dependent	-
Immunoprecipitation (IP)	-	1 Publication
Neutralization (Neu)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

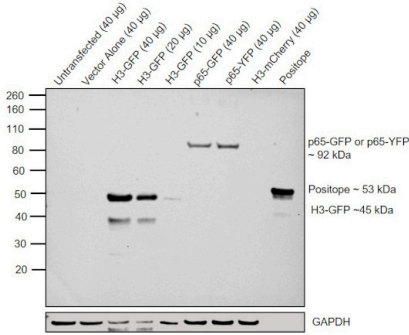
## Product Specific Information

The Alexa Fluor™ dyes provide for extraordinarily bright antibody conjugates. At the time of preparation, the products are certified to be free of unconjugated dyes and are tested in a cytological experiment to ensure low nonspecific staining. For Alexa Fluor™ 647 the approximate fluorescence excitation (Ex) and emission (Em) maxima, in nm: Ex 650/Em 668.

It is a good practice to centrifuge the protein conjugate solutions briefly in a microcentrifuge before use; add only the supernatant to the experiment. This step eliminates any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining.

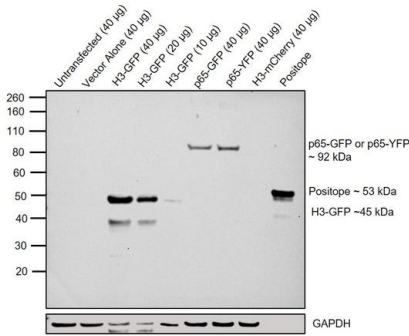
GFP Antibody (A-31852)

Antibody specificity was demonstrated by detection of different targets fused to GFP tag in transiently transfected lysates tested. Relative detection of GFP tag was observed across different proteins fused with GFP in H3-GFP (Lane 3-5) and p65-GFP (Lane 6). GFP-variant, YFP is also being detected in His-p65-YFP lysate (Lane 7), using Anti-GFP Polyclonal Antibody, Alexa Fluor 647 (Product # A-31852) in Western Blot. {RE}



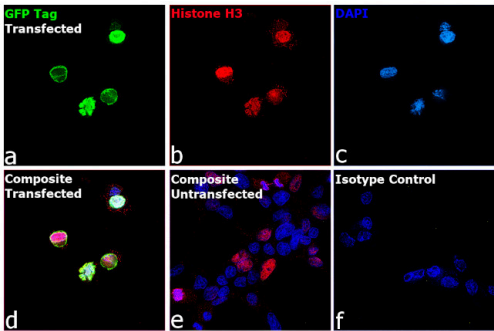
GFP Antibody (A-31852) in WB

Western Blot was performed using Anti-GFP Polyclonal Antibody, Alexa Fluor 647 (Product # A-31852) by loading whole cell extracts of untransfected and transiently transfected HEK-293E lysates: untransfected, 40 µg (Lane 1), empty vector control, 40 µg (Lane 2), H3-GFP, 40 µg (Lane 3), H3-GFP, 20 µg (Lane 4), H3-GFP, 10 µg (Lane 5), p65-GFP, 40 µg (Lane 6), His-p65-YFP, 40 µg (Lane 7), H3-mCherry, 40 µg (Lane 8) and 25 ng Positope (Lane 9) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). A ~45 kDa band of H3-GFP and a ~92 kDa band of p65-GFP were observed in transfected lysates on probing with primary antibody (1:2000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP (Product # A27036, 1:4000 dilution) using the iBright FL 1500 (Product # A44241). Positope (Product # R90050) is a 53 kDa recombinant protein consisting multiple epitope tags, which has been used as a positive control for GFP detection. This product also detects Yellow Fluorescent Protein (YFP), a variant of GFP as observed in Lane 7. No cross-reactivity was seen with mCherry (RFP family) expressing lysate.



GFP Antibody (A-31852) in ICC/IF

Immunofluorescent analysis of GFP Tag was performed using H3-GFP Tag transfected HEK-293 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with GFP Polyclonal Antibody, Alexa Fluor 647 (Product # A-31852) at 2.5 µg/mL and Histone H3 Monoclonal Antibody (865R2) Product # AHO1432 at 1:200 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 555 (Product # A32727) at a dilution of 1:2000 for 45 minutes at room temperature. Panel a (Nuclei: Green) represents GFP Polyclonal Antibody, Alexa Fluor 647, a green pseudo-colour has been given after image capture. Panel b (Nuclei: Red) represents Histone H3. Panel c (Nuclei: Blue) represents ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). Panel d represents the merged image showing the co-localization of nuclear signals in transfected cells. Panel e represents untransfected HEK cells. Panel f represents control cells with isotype control antibody to assess background. The images were captured at 60X magnification.



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Western Blot (1)

<p>The Journal of physiology</p> <p>Differential dissociation of G protein heterotrimers.</p> <p>"Published figure using GFP polyclonal antibody (Product # A-31852) in Western Blot"</p> <p>Authors: Digby GJ,Sethi PR,Lambert NA</p>	<p>Year</p> <p>2008</p> <p>Species</p> <p>Tag</p> <p>Dilution</p> <p>1:500</p>
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Immunohistochemistry (12)

<p>Journal of molecular cell biology</p> <p>Pyk2 suppresses contextual fear memory in an autophosphorylation-independent manner.</p> <p>"Published figure using GFP polyclonal antibody (Product # A-31852) in Immunocytochemistry"</p> <p>Authors: Zheng J,Suo L,Zhou Y,Jia L,Li J,Kuang Y,Cui D,Zhang X,Wu Q</p>	<p>Year</p> <p>2022</p> <p>Species</p> <p>Tag</p>
<p>Nature communications</p> <p>Super-resolution label-free volumetric vibrational imaging.</p> <p>"A-31852 was used in Immunohistochemistry to report a general sample-expansion vibrational imaging strategy, termed VISTA, for scalable label-free high-resolution interrogations of protein-rich biological structures with resolution down to 78 nm."</p> <p>Authors: Qian C,Miao K,Lin LE,Chen X,Du J,Wei L</p>	<p>Year</p> <p>2021</p> <p>Species</p> <p>Tag</p> <p>Dilution</p> <p>1:100</p>

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Immunohistochemistry (Frozen) (2)

<p>Theranostics</p> <p>Imaging, myeloid precursor immortalization, and genome editing for defining mechanisms of leukocyte recruitment <i>in vivo</i>.</p> <p>"Published figure using GFP polyclonal antibody (Product # A-31852) in Immunofluorescence"</p> <p>Authors: Gran S,Honold L,Fehler O,Zenker S,Eligehausen S,Kuhlmann MT,Geven E,van den Bosch M,van Lent P, Spiekermann C,Hermann S,Vogl T,Schäfers M,Roth J</p>	<p>Year</p> <p>2019</p> <p>Species</p> <p>Tag</p> <p>Dilution</p> <p>1:100</p>
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- ICC/IF (12)
- Flow (1)
- IP (1)
- Neu (1)
- Misc (1)

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