

ARG62993 anti-GFP antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GFP
Tested Reactivity	Other
Tested Application	ICC/IF, IP, WB
Specificity	The polyclonal antibody recognizes GFP, EGFP, EYFP fusion proteins in all species.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GFP
Immunogen	EGFP, a native full-length protein.
Conjugation	Un-conjugated

Application Instructions

Application table	Application	Dilution
	ICC/IF	1 - 3 µg/ml
	IP	10 - 20 µg/sample
	WB	0.5 - 1.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purified from rabbit serum by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Database links

[GeneID: 7011691 Other](#)

Background

Green fluorescence protein (GFP) is a 27 kDa protein derived from the bioluminescent jellyfish *Aequorea victoria*, emitting green light ($\lambda=509$ nm) when excited (excitation by Blue or UV light, absorption peak $\lambda=395$ nm).

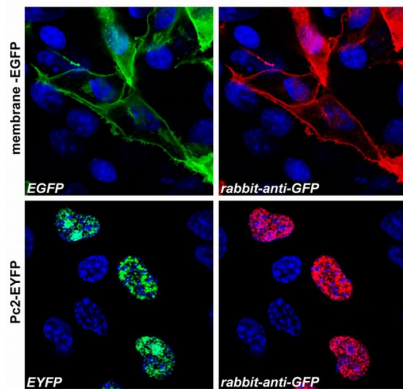
GFP is a useful tool in cell biology research, as its intrinsic fluorescence can be visualized in living cells. Light-stimulated GFP fluorescence is species-independent and a fluorescence has been reported from many different types of GFP-expressing hosts, including microbes, invertebrates, vertebrates and plants. No exogenous substrates and cofactors are required for the fluorescence of GFP, since GFP autocatalytically forms a fluorescent pigment from natural amino acids present in the nascent protein.

GFP fluorescence is stable under fixation conditions and suitable for a variety of applications. GFP is widely used as a reporter (tag) for gene expression, enabling researchers to visualize and localize GFP-tagged proteins within living cells without any further staining. Other applications of GFP include measurement of distance between proteins through fluorescence energy transfer (FRET) protocols. To increase a fluorescence intensity of GFP, chromophore mutations have been created. The Enhanced GFP has a fluorescence 35 times more intense than the wt-GFP. Mutagenesis of GFP has produced also many mutants (e.g. Yellow Fluorescent Protein, Cyan Fluorescent Protein) with varying spectral properties. Antibodies raised against full-length GFP variants should also detect other variants of the protein.

Research Area

Controls and Markers antibody; Tag Internal Control antibody; Fluorescent-Tags antibody

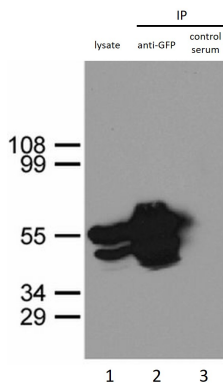
Images



ARG62993 anti-GFP antibody ICC/IF image

Immunofluorescence: Confocal microscopy images of COS-7 cells transfected with expression constructs encoding membrane-tethered EGFP (membrane-EGFP; top) or nuclear Polycomb 2-EYFP fusion protein (Pc2-EYFP; bottom).

The natural fluorescence of the produced proteins is shown in the green channel (left), ARG62993 anti-GFP antibody signal was detected in the red channel (right). The blue nuclear stain is also shown.



ARG62993 anti-GFP antibody IP image

Immunoprecipitation of GFP-NLS from HEK293 cells using anti-GFP antibody. HEK293 cells were transfected with expression construct encoding GFP-NLS protein. 20 hours post transfection cells were lysed in non-denaturing conditions (Lysis buffer: 20 mM Tris, pH 7.5, 100 mM NaCl, 0.5% Triton X-100, inhibitors of proteases). Aliquots of cell lysate were immunoprecipitated with ARG62993 anti-GFP antibody (lane 2) or a pre-immune rabbit serum (lane 3). Immunoprecipitates together with a sample of the cell lysate (lane 1) were separated on SDS-PAGE polyacrylamide gel and stained with ARG62993 anti-GFP antibody.