

Product Data Sheet

Product Name: Anti-GFP-Tag, Chicken IgY

(Aequorea victoria Green Fluorescent Protein)

Catalog Number: 55423

Lot Number: See label on the vial

Product Description: This chicken polyclonal antibody is supplied as an affinity purified chicken

IgY 100 μg in 500 μl of 10 mM PBS (pH 7.5) containing 0.01% sodium azide.

Immunogen: Full length GFP highly purified from Aequorea victoria (jellyfish)

Species Reactivity: The species reactivity is exclusively to Aequorea victoria. Antibody reactivity

was confirmed by ELISA. Specificity was confirmed by western blot using GFP protein. This antibody will also recognize other GFP mutant forms.

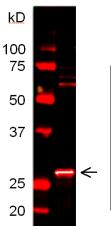
Application Notes: The following concentration ranges are recommended starting points for this

product. The investigator should determine the optimal working

concentrations for specific applications.

ELISA for protein: 1: 5,000-20,000 Western Blot: 1: 1,000-5,000

Immunohistochemistry: 1: 500-1,000 (1-2 μ g/ml) Immunoprecipitation: 2-5 μ g/10⁷ cells extract



GFP protein (~150 ng) was probed on the Western blot using anti-GFP-Tag chicken IgY antibody (1:1,000 dilution)(Cat.# 55423). Secondary rabbit anti-chicken IgY-HilyteFluor™ 680 nm labeled antibody (Cat.# 29709-H680) was used to visualize fluorescent band in the near-infrared part of the light spectra. An immunoreactive band was detected at ~27 kDa.

Background:

Green fluorescent protein (GFP) is a 27-kDa protein, which was originally cloned from Jellyfish cnidarians, *Aequorea victoria*. This exceptional protein absorbs blue light (maximally at 395 nm) and emits green light (peak at 509 nm) without any requirement of exogenous substrates and cofactors (1). These unique qualities of its intrinsic fluorescence make GFP become an invaluable tool in cell biology research such as monitoring gene expression and protein localization of GFP-tagged proteins in vivo. Other applications of GFP also include assessment of protein-protein interactions through the yeast two hybrid system and measurement of distance between proteins through fluorescence energy transfer (FRET) protocols. Several mutant forms of GFP have been developed which fluoresce more intensely and have shifted excitation maximum when compared to the wild type GFP, making them useful for FACS, fluorescence microscopy, and double-labeling applications (2, 3).

References:

Chalfie M. et al, Science 263: 802-805, 1994.
Cormack B.P. et al, Gene 173: 33-38, 1996
Rizzuto R. et al, Curr.Biol. 6:183-188 1996

Storage: Store at 4 °C for up to 12 months.

Related Products: Anti-GFP Tag, Rabbit Polyclonal, Catalog No. 29779

Anti-GFP (CT) Tag, Rabbit Polyclonal, Catalog No. 53882 Anti-GFP (IN) Tag, Rabbit Polyclonal, Catalog No. 53214 Anti-GFP (NT) Tag, Rabbit Polyclonal, Catalog No. 54045

Compatible Secondary Antibodies:

Catalog #	Rabbit anti-chicken IgG (H+L)
29709	Rabbit anti - Chicken IgY, purified
29711	Rabbit anti - chicken IgG (H+L), AP - conjugated
29709-AMCA	Rabbit anti - chicken IgY (H+L), AMCA - labeled
29712	Rabbit anti - Chicken IgY (H+L), Biotinylated
29709-FAM	Rabbit anti - chicken IgY (H+L), FAM - labeled
29709-FITC	Rabbit anti - chicken IgY (H+L), FITC - labeled
29709-H488	Rabbit anti - chicken IgY (H+L), HiLyte Fluor™ 488 - labeled
29709-H555	Rabbit anti - chicken IgY (H+L), HiLyte Fluor™ 555 - labeled
29709-H594	Rabbit anti - chicken IgY (H+L), HiLyte Fluor™ 594 - labeled
29709-H647	Rabbit anti - chicken IgY (H+L), HiLyte Fluor™ 647 - labeled
29709-H680	Rabbit anti - chicken IgY (H+L), HiLyte Fluor™ 680 - labeled
29709-H750	Rabbit anti - chicken IgY (H+L), HiLyte Fluor™ 750 - labeled
29709-Plus555	Rabbit anti - chicken IgY (H+L), HiLytePlus™ 555 - labeled
29709-Plus647	Rabbit anti - chicken IgY (H+L), HiLytePlus™ 647 - labeled
29709-Plus750	Rabbit anti - chicken IgY (H+L), HiLytePlus™ 750 - labeled
29710	Rabbit anti - Chicken IgY (H+L), HRP - Conjugated
29709-TAMR	Rabbit anti - chicken IgY (H+L), TAMRA - labeled

This product is for in vitro research use only.