

Product Data Sheet

Product Name: Anti - GFP Tag (CT)

Catalog Number: 53882

Lot Number: See label on vial

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

IgG, 100 μg in 500 μl of 1X PBS (pH 7.4) containing 0.05% sodium

azide.

Immunogen: Rabbits were immunized with a synthetic peptide corresponding to C-

terminal region of green-fluorescent protein (GFP) isolated from

Aeguorea victoria.

Species Reactivity: Species reactivity includes Aequorea victoria, while others remain

unknown. This antibody will also recognize all GFP fusion proteins.

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

this product.

WB: 1:500-1:1000

*IP: 2.0-5.0 µg/extract from 107 cells

*IHC: 2.0-5.0 μg/ml

(*Recommended but not tested)

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).

Storage: Store at 2-8°C for up to one year. Avoid repeated freezing and thawing.

References:

- 1. Cormack, B.P. et al. Gene 173, 33 (1996).
- 2. Rizzuto, R. et al. Curr Biol 6, 183 (1996).
- 3. Chalfie, M. et al. Science 263, 802 (1994).

This product is for *in vitro* research use only.