SANTA CRUZ BIOTECHNOLOGY, INC.

GFP (A00185.01): sc-81045

BACKGROUND

The green fluorescent protein (GFP) was originally identified as a protein involved in the bioluminescence of the jellyfish *Aequorea victoria*. GFP cDNA produces a fluorescent product when expressed in prokaryotic cells, without the need for exogenous substrates or cofactors, making GFP a useful tool for monitoring gene expression and protein localization *in vivo*. Several GFP mutants have been developed, including EGFP, which fluoresce more intensely than the wildtype GFP and have shifted excitation maxima, making them useful for FACS and fluorescence microscopy as well as double-labeling applications. GFP is widely used in expression vectors as a fusion protein tag, allowing expression and monitoring of heterologous proteins fused to GFP.

REFERENCES

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2. Chalfie, M., et al. 1994. Green fluorescent protein as a marker for gene expression. Science 263: 802-805.
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4. Cormack, B.P., et al. 1996. FACS-opitmized mutants of the green fluorescent protein (GFP). Gene 173: 33-38.
5. Rizzuto, R., et al. 1996. Double labelling of the subcellular structures with organelle-targeted GFP mutants *in vivo*. Curr. Biol. 6: 183-188.
6. Enoki, S., et al. 2004. Acid denaturation and refolding of green fluorescent protein. Biochemistry 43: 14238-14248.
7. Nowak, K., et al. 2004. Fluorescent proteins in poplar: a useful tool to study promoter function and protein localization. Plant Biol. 6: 65-73.

SOURCE

GFP (A00185.01) is a mouse monoclonal antibody raised against recombinant GFP.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

GFP (A00185.01) is recommended for detection of GFP and GFP fusion proteins by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Molecular Weight of GFP: 27 kDa.

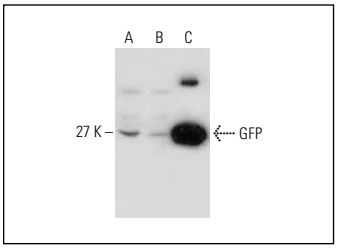
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

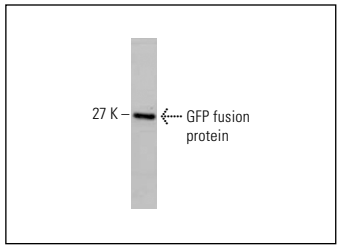
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



GFP (A00185.01): sc-81045. Western blot analysis of GFP expression in OFP transfected (**A**) and EGFP transfected (**B**) 293 whole cell lysates and GFPuv protein (**C**).



GFP (A00185.01): sc-81045. Western blot analysis of recombinant GFP fusion protein.

SELECT PRODUCT CITATIONS

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3. Gabryelska, M.M., et al. 2013. Prediction of hammerhead ribozyme intracellular activity with the catalytic core fingerprint. Biochem. J. 451: 439-451.
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