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 fluoresces 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


SOURCE

GFP (B-2) is a mouse monoclonal antibody raised against amino acids 1-238 representing full length GFP (green fluorescent protein) of *Aequorea victoria* origin.

PRODUCT

Each vial contains 200 μg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GFP (B-2) is available conjugated to agarose (sc-9996 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-9996 HRP), 200 μg/ml, for WB, IHC, and ELISA; and to either phycoerythrin (sc-9996 PE), fluorescein (sc-9996 FITC), Alexa Fluor® 488 (sc-9996 AF488) or Alexa Fluor® 647 (sc-9996 AF647), 200 μg/ml, for IF, IHC, and FCM.

In addition, GFP (B-2) is available conjugated to biotin (sc-9996 B), 200 μg/ml, for WB, IHC, and ELISA; and to either TRITC (sc-9996 TRITC, 200 μg/ml), PerCP (sc-9996 PerCP), PerCP-Cy5.5 (sc-9996 PC5) or Alexa Fluor® 405 (sc-9996 AF405), 100 tests in 2 ml, for IF, IHC, and FCM. Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

GFP (B-2) is recommended for detection of GFP and GFP mutant fusion proteins by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 μg per 1 × 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). 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 (B-2) sc-9996. Western blot analysis of GFP expression in COS (A) and GFP transfected COS (B) cell lysates.

SELECT PRODUCT CITATIONS


PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.