Qty: 100 µg/200 µl

Mouse anti-GFP

Catalog No. 33-2600

Lot No.:

Mouse anti-GFP (Green Fluorescent Protein)

FORM
This monoclonal antibody is highly purified from mouse ascites by protein A-affinity chromatography and supplied as a 200 µl aliquot at a concentration of 0.5 mg/ml in phosphate buffered saline, pH 7.4, containing 0.1% sodium azide.

CLONE: C163 **ISOTYPE:** IgG_1-kappa

IMMUNOGEN: Purified recombinant GFP protein.

SPECIFICITY
This monoclonal antibody is specific for the green fluorescent protein (GFP) from the jellyfish *Aequorea victoria*. This antibody can be used to detect GFP and GFP variants in Western blots and produces a highly specific signal with very low background. On Western blots, the antibody can easily detect as little as 40 pg of recombinant GFP protein. Lower amounts of protein can be detected if chemiluminescent detection is employed. Clone C163 has not yet been tested for its utility in other applications such as immunoprecipitation and immunohistochemistry.

REACTIVITY
Lysates Tested: purified recombinant GFP protein, transfected cell lines expressing GFP-tagged proteins, and lysates derived from Drosophila embryos expressing a GFP-chimaeric gene.

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature, and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting[(4)]: 1-2 µg/ml

STORAGE
Do not freeze. This antibody should be stored at 2-8°C.

(cont'd)

BACKGROUND[1-3]:

Green fluorescent protein (GFP) is a 27 kDa (238 amino acid) monomeric protein, which autocatalytically forms a fluorescent pigment. The wild type protein absorbs blue light (maximally at 395 nm) and emits green light (peak emission 508 nm) in the absence of additional proteins, substrates, or co-factors. Intact, native GFP protein is required for fluorescence; however, the GFP chromophore results from the cyclization and oxidation of the sequence Ser^{65}-Tyr^{66}-Gly^{67}. GFP fluorescence is stable, species-independent and is suitable for a variety of application. To this end, GFP has been used extensively as a fluorescent tag to monitor gene expression and protein localization. Moreover, other applications for GFP include its use in assessing protein-protein interactions in the yeast two-hybrid system, and in measuring distances between proteins in fluorescence energy transfer (FRET) experiments.

REFERENCES

1. Prasher, D.C., et al. (1992) *Gene* 111:229-233 (1982).
2. Chalfie, M., et al. (1994) *Science* 263:802-805 (1994).
3. Youvan, D.C. (1995) *Science* 268:264 (1995).
4. Ilic, D., et al; *J. Cell Biol.* 143(2):547-560 (1998).

RELATED PRODUCTS

Product	*Clone/PAD*	*Cat. No.*
Ms x Biotin	Z021	03-3700
Ms x Biotin (HRP conjugate)	Z021	03-3720
Ms x c-Myc	9E10	13-2500
Rb x DNP (dinitrophenol)	ZDNP1	71-3500
Rb x FITC (fluorescein isothiocyanate)	ZFITC1	71-1900
Ms x GST (glutathione S-transferase)	GST 3-4C	13-6700
Ms x GST (Sepharose conjugate)	GST 3-4C	13-6741
Rb x HA	SG77	71-5500
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

PAD: Polyclonal Antibody Designation

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)	Protein A	rec-Protein G
Purified	81-6100	81-6500	10-1001	10-1200
FITC	81-6111	81-6511	10-1011	10-1211
TRITC	81-6114	81-6514	--	--
Cy™3	81-6115	81-6515	--	--
Cy™5	81-6116	81-6516	--	--
HRP	81-6120	81-6520	10-1023	10-1223
AP	81-6122	81-6522	10-1022	10-1222
Biotin	81-6140	81-6540	10-1040	10-1240

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