

DESCRIPTION

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|---------------------|--|
| Specificity | Detects recombinant GFPuv and eGFP in Western blots. |
| Source | Monoclonal Mouse IgG ₁ Clone # 454505 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>E. coli</i> -derived recombinant GFPuv Ser2-Lys238 Accession # P42212 |
| Conjugate | Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm |
| Formulation | Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

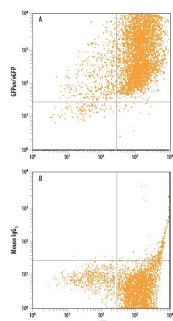
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|--|-----------------------------|-----------|
| Intracellular Staining by Flow Cytometry | 10 µL/10 ⁶ cells | See Below |

DATA

Intracellular Staining by Flow Cytometry



Detection of GFPuv/eGFP in HEK293 Human Cell Line Transfected with eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with eGFP was stained with either (A) Mouse Anti-GFPuv/eGFP PE-conjugated Monoclonal Antibody (Catalog # IC42401P) or (B) Mouse IgG₁ Phycoerythrin Isotype Control (Catalog # IC002P). To facilitate intracellular staining, cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for [Staining Intracellular Molecules](#).

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage **Protect from light. Do not freeze.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Green fluorescent protein (GFP) is a 27 kDa protein originally isolated from the jellyfish *Aequorea victoria*. In the presence of UV light (490-520 nm), it emits a green fluorescent color that can be used to pinpoint locations of various intracellular proteins. GFP is 238 amino acids (aa) in length. It is a globular monomer that has a tendency to dimerize. The monomer has the shape of a β-barrel with a chromophore (aa 65-67) containing α-helix running up its center. GFPuv is the *Aequorea* sequence with three aa substitutions; Phe to Ser at # 99, Met to Thr at # 153, and Val to Ala at # 163. This form expresses faster and is 18-fold brighter than native GFP; excitation peaks at 395 nm and emission at 508 nm.