

DESCRIPTION

Specificity	Detects recombinant GFPuv and eGFP in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 454505R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant GFPuv Ser2-Lys238 Accession # P42212
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2 mg/mL 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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	HEK293 human embryonic kidney cell line transfected with eGFP

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. <ul style="list-style-type: none"> 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.

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