

Anti-GFP antibody, rabbit serum

60-011, 100 ul

The **green fluorescent protein (GFP)** is composed of 238 amino acids (26.9 kDa), originally isolated from the jellyfish *Aequorea victoria* that fluoresces green when exposed to blue light (1). In cell and molecular biology, the **GFP** fused gene is frequently used as a reporter of expression and protein localization (2, 3).

Applications:

1. Western blotting (dilution: 1/2,000)
2. Immunoprecipitation (assay dependent)
3. Immunofluorescence/Immunohistochemistry (1/4,000)

Immunogen: Recombinant His-tagged EGFP

Specificity Reactive to all variants of *Aequorea victoria* GFP such as S65T-GFP, RS-GFP, YFP, EGFP, and their-fusion proteins

Form: Antiserum added with 0.05% sodium azide

Storage: Shipped at 4°C or -20°C, and upon arrival, aliquot and store at -20°C.

Data Link: Swiss-Prot [P42212](#) (GFP_AEQVI)

References:

1. Shimomura O *et al* (1962) "Extraction, purification and properties of aequorin, a bioluminescent protein from the luminous hydromedusan, *Aequorea*." *J Cell Comp Physiol* **59**: 223–239 PMID: [13911999](#)
2. Chalfie M *et al* (1994) "Green fluorescent protein as a marker for gene expression." *Science* **263** (5148): 802–805 PMID: [8303295](#)
3. Tsien R (1998) "The green fluorescent protein." (PDF) *Annu Rev Biochem* **67**: 509–544 PMID: [9759496](#)

Fig.1 Detection of GFP protein with this antibody by Western blotting.

- : Lysate of 293T cells transfected with an empty vector
- +: Lysate of 293T cells transfected with the plasmid carrying the GFP gene

Fig.2 Immunoprecipitation of GFP-tagged protein with this antibody followed by Western blotting.

- : Lysate of 293T cells transfected with an empty vector
- +: Lysate of 293T cells transfected with the plasmid carrying the GFP-tagged NPM1 gene

Related product: [#60-001](#) anti-GFP monoclonal antibody (1A5)

Fig.1

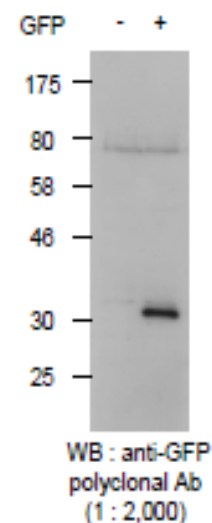
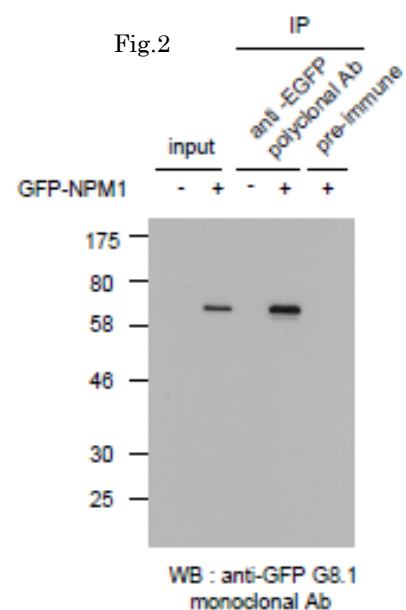


Fig.2



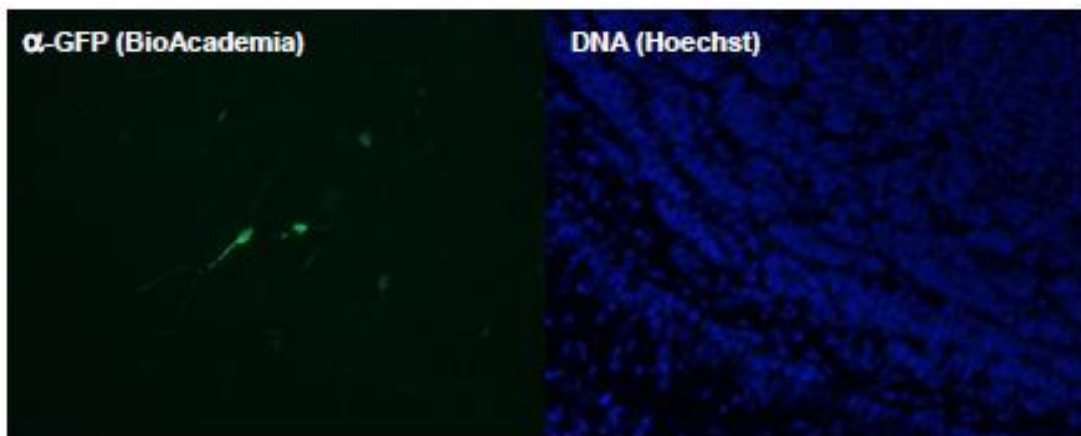


Fig.3 Immunohistochemical staining of GFP with anti-GFP antibody.

Mouse brain tissues were infected with a GFP-expressing lentivirus at postnatal day 0, cut into blocks containing the olfactory bulb at postnatal day 8, fixed with 4% paraformaldehyde solution in 100 mM phosphate buffer (pH 7.4) overnight, and cryoprotected by immersion in 20% sucrose at 4°C overnight. Frozen 12 μm-thick tissue sections were treated with 3% BSA/0.1% Triton X-100 in PBS at room temperature for 1 hr, incubated with anti-GFP antibody (1:4000; BioAcademia) at 4°C overnight, and treated with Alexa 488-conjugated rabbit IgG (1:1000; Invitrogen) at room temperature for 1 hr. Chromosomal DNA was detected with 3.3 μM Hoechst 33342 (Sigma-Aldrich). The images were observed with a fluorescence microscope.