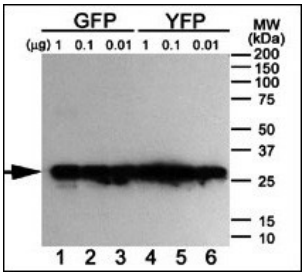
Anti-GFP Antibody / Green Fluorescent Protein [clone 168AT1211.269.64] (F53773)

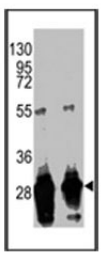
Catalog No.	Formulation	Size
F53773-0.1ML	In ascites with 0.09% sodium azide	0.1 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	GFP / YFP
Format	Ascites
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG
Clone Name	168AT1211.269.64
Purity	Ascites
Applications	Western Blot : 1:100-1:500
Limitations	This anti-GFP antibody is available for research use only.



Western blot analysis of anti-GFP antibody using purified GFP/YFP/BFP proteins expressed in bacteria: Both GFP (Lanes 1-3) and YFP (Lanes 4-6) but not BFP (data not shown) were detected.



Western blot analysis of anti-GFP antibody and recombinant protein.

Description

GFP antibody is a highly sensitive reagent designed for immunodetection of green fluorescent protein and GFP fusion

proteins in biochemical assays. While GFP fluorescence can often be detected directly, antibody based methods provide higher sensitivity and specificity, particularly in western blotting, ELISA, and immunoprecipitation. This makes the GFP antibody essential for validating expression levels and confirming protein size in fusion constructs.

Western blotting with GFP antibody allows precise detection of GFP-tagged proteins in lysates, even when native fluorescence is weak or masked. By confirming band size, researchers can verify correct fusion expression and identify cleavage products or degradation. ELISA applications with GFP antibody provide quantitative analysis of GFP protein levels in complex samples. Immunoprecipitation enables capture and study of GFP tagged proteins in protein interaction studies.

The molecular structure of GFP, with its beta barrel and intrinsic chromophore, makes it highly stable and resistant to proteolysis. These properties allow GFP to function as a fusion tag without disrupting protein folding. However, GFP antibody detection is often required to validate constructs in fixed or denatured samples, where intrinsic fluorescence may be compromised.

In addition to research in mammalian systems, GFP is frequently used in plants, yeast, and bacteria as a universal reporter. Antibody based detection ensures cross platform reliability and provides versatility in experimental systems where fluorescence microscopy is limited.

The GFP antibody is widely applied across immunoblotting, ELISA, immunoprecipitation, immunohistochemistry, and immunofluorescence. These techniques are critical for protein expression studies, construct validation, and interaction mapping. For researchers who rely on GFP fusion proteins, the GFP antibody provides a robust and specific reagent. NSJ Bioreagents supplies validated antibodies that deliver reproducibility and accuracy in advanced molecular assays.

Application Notes

Titration of the anti-GFP antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Purified His-tagged protein was used to produced this anti-GFP antibody.

Storage

Aliquot the anti-GFP antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.