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GFP Tag Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM1009A

Product Information

Application	WB, IF, E
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Names	168AT1211
Calculated MW	27 KDa

Additional Information

Target/Specificity	Purified His-tagged GFP protein was used to produced this monoclonal antibody.
Dilution	WB~~1:2,000 IF~~1:50~100 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GFP Tag Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

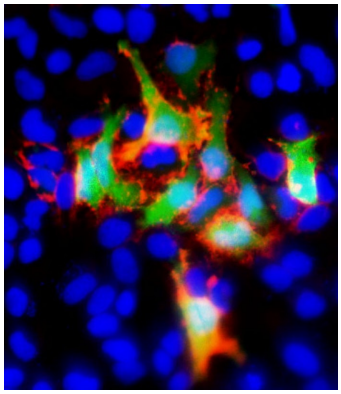
Background

Green fluorescent protein (GFP), originally isolated from the jellyfish Aequorea victoria, is one of the best visual reporters for monitoring gene expression in vivo and in situ. GFP is a also convenient marker for use in flow cytometry because it eliminates the need to incubate with a secondary reagent (such as dyes or antibodies) for detection. However, anti-GFP antibody is also widely used for co-immunipreciapitation, co-localization or western blotting for the confirmation of specificity when a GFP fusion protein is expressed in cells. Abgent's anti-GFP monoclonal antibody provides a simple solution to detect the expression of a GFP-tagged protein in cells. Because of its ability to spontaneously generate its own fluorophore, the green fluorescent protein (GFP) from the jellyfish Aequorea victoria is used extensively as a fluorescent marker in molecular and cell biology. The yellow fluorescent proteins (YFPs) have the longest wavelength emissions of all GFP variants examined to date. This shift in the spectrum is the result of a T203Y substitution (single-letter amino acid code), a mutation rationally designed on the basis of the X-ray structure of GFP S65T. Abgent's anti-GFP monoclonal antibody can detect both GFP and YFP but not BFP (Blue fluorescent protein) by western blotting.

References

Ward, W. W., et al.(1980) Photochem. Photobiol. 31:611

Images



Immunofluorescent analysis of GFP using either natural fluorescence (green) or an GFP antibody (red) in Hela(human cervical epithelial adenocarcinoma cell line) cells transfected with GFP recombinant protein. Formalin-fixed cells were permeabilized with 0. 1% Triton X-100 for 10 minutes at room temperature and blocked with 3% BSA for 30 minutes at room temperature. Cells were probed with an GFP monoclonal antibody (Product # AM1009a) at a dilution of 1:25 for 1 hour at 37C, and incubated with DyLight 555 goat anti-mouse IgG secondary antibody (Product # 1511348) at a dilution of 1:200 for 60 minutes at 37°C. The nuclear counter stain is DAPI (blue).

Citations

- Agent-based computational modeling of glioblastoma predicts that stromal density is central to oncolytic virus efficacy
- Gain-of-function genetic screening identifies the antiviral function of TMEM120A via STING activation
- Association of cystic fibrosis transmembrane conductance regulator with epithelial sodium channel subunits carrying Liddle's syndrome mutations
- Interplay between Extracellular Matrix Stiffness and JAM-A Regulates Mechanical Load on ZO-1 and Tight Junction Assembly
- β-Arrestin-Biased Allosteric Modulator of NTSR1 Selectively Attenuates Addictive Behaviors
- Potato Mop-Top Virus Co-Opts the Stress Sensor HIPP26 for Long-Distance Movement.
- Dual Roles of Two Isoforms of Autophagy-related Gene ATG10 in HCV-Subgenomic replicon Mediated Autophagy Flux and Innate Immunity.
- The common parasite Toxoplasma gondii induces prostatic inflammation and microglandular hyperplasia in a mouse model.
- Quantitative interaction mapping reveals an extended UBX domain in ASPL that disrupts functional p97 hexamers.
- Inactivation of TGFβ receptors in stem cells drives cutaneous squamous cell carcinoma.
- Stress Granules Modulate SYK to Cause Microglial Cell Dysfunction in Alzheimer\'s Disease.
- Expression and Purification of the Alpha Subunit of the Epithelial Sodium Channel, ENaC.
- Physical and Functional Interactions between a Glioma Cation Channel and Integrin β1 Require α-Actinin.
- Moesin and myosin phosphatase confine neutrophil orientation in a chemotactic gradient.
- Best practices for fluorescence microscopy of the cyanobacterial circadian clock.
- The Toxoplasma gondii centrosome is the platform for internal daughter budding as revealed by a Nek1 kinase mutant.
- RpL22e, but not RpL22e-like-PA, is SUMOylated and localizes to the nucleoplasm of Drosophila meiotic spermatocytes.
- Low temperature and chemical rescue affect molecular proximity of DeltaF508-cystic fibrosis transmembrane conductance regulator (CFTR) and epithelial sodium channel (ENaC).
- Glioma-specific cation conductance regulates migration and cell cycle progression.
- Interaction of ASIC1 and ENaC subunits in human glioma cells and rat astrocytes.
- Enhanced erythropoiesis in Hfe-KO mice indicates a role for Hfe in the modulation of erythroid iron homeostasis.
- Proteolytic cleavage of human acid-sensing ion channel 1 by the serine protease matriptase.
- A Toxoplasma MORN1 null mutant undergoes repeated divisions but is defective in basal assembly, apicoplast division and cytokinesis.
- The unique hypusine modification of eIF5A promotes islet beta cell inflammation and dysfunction in mice.
- Knockdown of ASIC1 and epithelial sodium channel subunits inhibits glioblastoma whole cell current and cell migration.
- Kv4 accessory protein DPPX (DPP6) is a critical regulator of membrane excitability in hippocampal CA1 pyramidal neurons.
- Localization of the phosphoethanolamine methyltransferase of the human malaria parasite Plasmodium falciparum to the Golgi apparatus.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.