Product Data Sheet  
**GFP-Tag Monoclonal Antibody**  
Catalog Number: ORF.GFPMAB-50

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| **Product Details** | |
| **Product Name** | GFP-Tag Monoclonal Antibody |
| **Catalog Number** | ORF.GFPMAB-50 |
| **Size** | 50 μL |
| **Concentration** | 1 mg/mL |
| **Clonality** | Monoclonal |
| **Source** | Mouse |
| **Isotype** | IgG |
| **Purification** | The antibody was purified by immunogen affinity chromatography. |

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| **Product Description** | | **Product Image** |
| Green Fluorescent Protein (GFP) is a naturally occurring protein from the jellyfish Aequorea victoria that emits bright green light during bioluminescence. Widely used as a reporter and protein tag in both eukaryotic and prokaryotic systems, GFP enables direct visualization of gene expression, protein localization, and dynamic cellular processes in living cells and organisms.  As a 27 kDa monomeric protein, GFP autocatalytically forms its fluorescent chromophore without the need for additional proteins, substrates, or cofactors. The wild-type protein absorbs blue light (peak at ~395 nm) and emits green light (peak at ~508 nm), with fluorescence that is highly stable, species-independent, and suitable for a variety of imaging applications.  GFP fusion tagging allows researchers to:   * Track protein localization and trafficking in live cells. * Study subcellular compartment dynamics. * Monitor gene expression patterns. * Investigate protein–protein interactions (e.g., yeast two-hybrid system). * Measure molecular proximity via Förster Resonance Energy Transfer (FRET) assays.   This monoclonal antibody specifically recognizes the GFP epitope, providing sensitive and specific detection in applications such as Western blotting, immunoprecipitation, immunofluorescence, and ELISA. It is suitable for detecting both native and denatured GFP and its common variants, ensuring consistent performance in research workflows. | |  |
| **Product Specifications and Product Specific Information** | | |
| **Applications** | WB: 1:2000 – 1:5000  IP: 1:100 – 1:200 | |
| **Reactivity** | N/A | |
| **Specificity** | Recognizes RFP, YFP, CFP | |
| **Immunogen** | Recombinant protein corresponding to GFP-tag | |
| **Description** | Mouse monoclonal antibody to GFP-tag | |
| **Buffer** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. | |

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| **Storage and Stability** | | |
|  | **Temperature** | **Storage Time** |
| **Short Term** | 4°C | 1 month |
| **Long Term** | -20°C | 12 months |
| **Avoid repeated freeze-thaw cycles.** | | |

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| **Product Data** |
| Immunoprecipitation of GFP-tagged protein from HEK293T cells transfected with vector overexpressing GFP tag using Anti-GFP-tag antibody. |