Data Sheet (Cat.No.TMPY-02451)

TargetMol

GFP Protein, Aequorea victoria, Recombinant (aa 2-238, His)

General Information

Synonyms:	GFP Protein
Protein Construction:	A DNA sequence encoding the Aequorea victoria GFP (AAB65663) (Ser2-Lys238) was expressed with a polyhistide tag at the N-terminus. Predicted N terminal: Met
Species:	Aequorea victoria
Expression Host:	E. coli
Accession:	AAB65663
Molecular Weight:	28.7 kDa (predicted); 34 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity Assay
Purity:	≥ 90 % as determined by SDS-PAGE. ≥ 85 % as determined by SEC-HPLC.
Endotoxin:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstituted with sterile deionized water to 0.25 mg/mL. Reconstitution conditions may vary depending on the lot.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

The green fluorescent protein (GFP) is a protein that exhibit bright green fluorescence when exposed to blue light. GFPSparkTM is an improved variant of the green fluorescent protein GFP. It possesses bright green fluorescence (excitation/ emission max = 487 / 508 nm) that is visible earlier than fluorescence of other green fluorescent proteins. GFPSparkTM is mainly intended for applications where fast appearance of bright fluorescence is crucial. Its amazing ability to generate a highly visible, efficiently emitting internal fluorophore is both intrinsically

fascinating and tremendously valuable. It is specially recommended for cell and organelle labeling and tracking the promoter activity.

Reference

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