Recombinant EGFP

Catalog # FL156

Product Specifications

Appearance	Sterile filtered White lyophilized (freeze-dried) powder.
Purity	> 96% by SDS-PAGE or HPLC.
Endotoxin	< 0.1 EU/μg of reGFP protein as determined by LAL method.
Expression System	Expressed in E. coli.
Tag	Tag free.
Activity	Green Fluorescent under UV radiation
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.
Reconstitution	Before use this product, please read the direction below carefully. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.
Accession #	ANC98519.1 Met167-Lys405
Amino acid sequence	MVSKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTLKFICTTGKLPVPWPTLVTTLTYGVQCFSRYPDHMKQ HDFFKSAMPEGYVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNSHNVYIMADKQKNGIK VNFKIRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALSKDPNEKRDHMVLLEFVTAAGITLGMDELYK
Molecular weight	Approximately 26.9 kDa, a single non-glycosylated polypeptide chain containing 239 amino acids.
Stability & Storage	Shipped on wet ice. For long term storage, the product should be stored ≤ -20°C. Please avoid repeated freeze-thaw cycles afte r reconstitution. 36 months from date of receipt, -20 to -70°C as supplied. 1 month, 2 to 8°C under sterile conditions after reco nstitution. 3 months, -20 to -70°C under sterile conditions after reconstitution.
Precautions	Recombinant EGFP is for research use only and not for use in diagnostic or therapeutic procedures.

Background

The recombinant eGFP was expressed and purified from transformed E. coli using a method that ensures high purity and maxi mal eGFP fluorescence. Endotoxin was removed, so the protein is suitable for in vivo injection or cell culture applications. Gree n fluorescent protein (GFP) here refers to the protein first purified from jellyfish Aequorea Victoria, though many other organis ms have similar proteins. It is a 26.9kDa protein (composed of 238 AA residues) that shows green fluorescence in short-wave l ight (blue to ultraviolet) . Enhanced GFP (eGFP) has S65T and F64L mutations, which make GFP show increased fluorescence and fold more efficiently under 37°C, respectively. eGFP allows the use of GFP in mammalian cells. In A. Victoria, GFP plays r oles as an energy transfer acceptor. It has long been used in cell and molecular biology as a reporter of gene expression. GFP c an also been applied as a molecular thermometer to measure temperature accurately in fluids.
.Product Information

Validation Images