

Alfred-Nobel-Str. 10 • 40789 Monheim • Germany Phone: +49 (0)2173 993730 contact@cube-biotech.com www.cube-biotech.com

# eGFP His-tag

Product	Catalog No.	Package size
eGFP His tag (50 ug)	29901	1 x 50 µg
eGFP His tag (250 ug)	29903	1 x 250 μg

#### **Product Description**

Green Fluorescent Protein is a natural, autofluorescent protein from the jellyfish *Aequorea victoria* that is frequently used as a control protein in method development and calibration. Enhanced GFP (eGFP) is a mutated GFP with enhanced fluorescence signal and a slightly shifted excitation spectrum. Cube Biotech offers three variants of eGFP with His, GST, Rho1D4, and DYKDDDDK (also known as FLAG®) tags.

Protein class	beta-barrel, autofluorescent protein	
Sequence	7 x His tag	
	MKHHHHHHMRSGKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTLKFICTTG KLPVPWPTLVTTLTYGVQCFSRYPDHMKQHDFFKSAMPEGYVQERTIFFKDDGNYKTRAEVKFE GDTLVNRIELKGIDFKEDGNILGHKLEYNYNGHNVYITADKQKNGIKANFKIRHNIEDGSVQLA DHYQQNTPIGDGPVLLPDNHYLSTQSALSKDPNEKRDHMVLLEFVTAAGITHGMDELYK	
Affinity tags	His tag (N-terminus)	
Size	249 amino acids 26 kDa	
Excitation maximum	488 nm	
Fluorescence maximum	509 nm	

### **Quality Control**

Purity	>98% as determined by SDS-PAGE, see Figure 1
runty	790 % as determined by 3D3-FAGE, see Figure 1

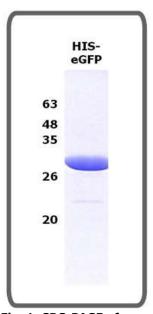


Fig. 1: SDS-PAGE of His-eGFP.

### **Preparation:**

Expression system	E. coli
Purification	PureCube Ni-NTA Agarose
Buffer	Lyophilized from 10 mM Tris-HCl, pH 4.0
Reconstitution	Dissolve in a suitable volume of ddH $_2$ O, e.g., 50 $\mu$ L (50 $\mu$ g aliquot) /250 $\mu$ L (250 $\mu$ g aliquot) to obtain a 1 mg/mL solution.
Quantity	50 and 250 μg aliquots

## **Applications**

- SDS-PAGE
- Western Blot
- Protein Crystallization
- Biochemical and biophysical analyses

## **Shipping & Storage**

Shipping conditions	Room temperature	
Storage conditions	-20°C. Avoid freeze-thaw cycles	
Important: GFP is light-sensitive and must be stored in the dark.		

<u>Disclaimer</u>: Our products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease. FLAG is a registered trademark of Sigma Aldrich.