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GST-eGFP fusion protein, DYKDDDDK-tag

Product	Catalog No.	Package size
GST-eGFP fusion protein, DYKDDDDK tag (50 ug)	29921	1 x 50 μg
GST-eGFP fusion protein, DYKDDDDK tag (250 ug)	29923	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	GFP, Thrombin cleavage site, HRV3C (PreScission) cleavage site, Spacer, DYKDDDDK tag	
	MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFELGLEFPNLPYY IDGDVKLTQSMAIIRYIADKHNMLGGCPKERAEISMLEGAVLDIRYGVSRIAYSKDFE TLKVDFLSKLPEMLKMFEDRLCHKTYLNGDHVTHPDFMLYDALDVVLYMDPMCLDAF PKLVCFKKRIEAIPQIDKYLKSSKYIAWPLQGWQATFGGGDHPPKSDLVPRGSLEVL FQGPMRSGKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTLKFICTTGKLPVPW PTLVTTLTYGVQCFSRYPDHMKQHDFFKSAMPEGYVQERTIFFKDDGNYKTRAEVKFEGDTLVN RIELKGIDFKEDGNILGHKLEYNYNGHNVYITADKQKNGIKANFKIRHNIEDGSVQLADHYQQN TPIGDGPVLLPDNHYLSTQSALSKDPNEKRDHMVLLEFVTAAGITHGMDELYKGSSGDYKDDDK	
Affinity tags	GFP tag (N-terminus), DYKDDDDK (FLAG) tag (C-terminus)	
Size	486 amino acids 55.5 kDa	
Excitation maximum	488 nm	
Fluorescence maximum	509 nm	

Quality Control

Purity	>98% as determined by SDS-PAGE, see Figure 1

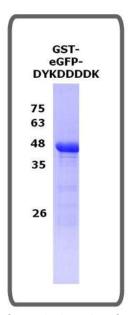


Fig. 1: SDS-PAGE of GST-eGFP-DYKDDDDK.

Preparation:

Expression system	E. coli
Purification	PureCube Glutathion Agarose
Buffer	Lyophilized from 10 mM Tris-HCl, pH 4.0
Re	Dissolve in a suitable volume of ddH2O, e.g., 50 μL (50 μg aliquot) /250 μL (250 μg 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.