


Firefly Luciferase

Cat #:PRP3004

Size: 1 mg/5 mg/25 mg

Product Information

	Product Name: Firefly Luciferase		
REF	Catalog Number: PRP3004	LOT	Lot Number: Refer to product label
	Purity: > 98% as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: <i>E. coli</i>
	Shipping: The product is shipped by ice pack or gel pack with blue ice		

Background: Firefly Luciferase catalyzes the reaction of luciferin with ATP and results in the production of yellow-green light. The enzyme has a molecular weight of 62 kDa and is expressed in peroxisomes. Luciferase is considered a model for studying protein-anesthetic interactions. Firefly Luciferase is very useful in cell biology and molecular biology as a reporter of gene function and for the quantification of ATP.

Sequence: Amino acid sequence of luciferase derived from *Photinus pyralis* (firefly) was expressed with 6xHis tag at the N-terminus.

Protein length: The recombinant Firefly Luciferase predicts a molecular mass of 62 kDa.

Biological Activity: >10⁹ RLU/mg protein as determined in the presence of ATP and luciferin.

Formulation: Liquid in from sterile 20 mM Tris, 150 mM NaCl, 1mM DTT, pH 8.0.

Storage Instructions: Firefly Luciferase product can be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Please ensure that the product is frozen before proceeding. Dissolve slowly at 4°C before use, and then proceed with other operations. If dilution is required, you can use a solution of 20 mM Tris, 150 mM NaCl, 1 mM DTT, pH 8.0 to dilute to the specified concentration. For long-term storage, it is recommended to add 0.1% HSA or BSA or 5% trehalose.

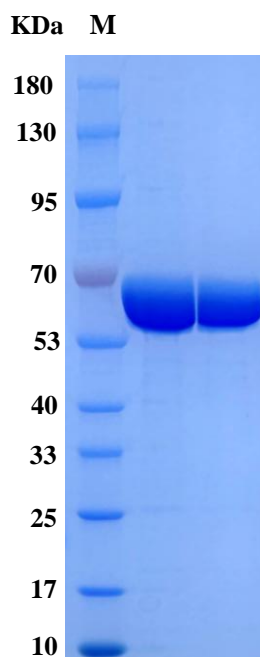


Fig. SDS-PAGE analysis of Luciferase Firefly.

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