

# Bioluminescence Assay Solutions at Creative BioMart

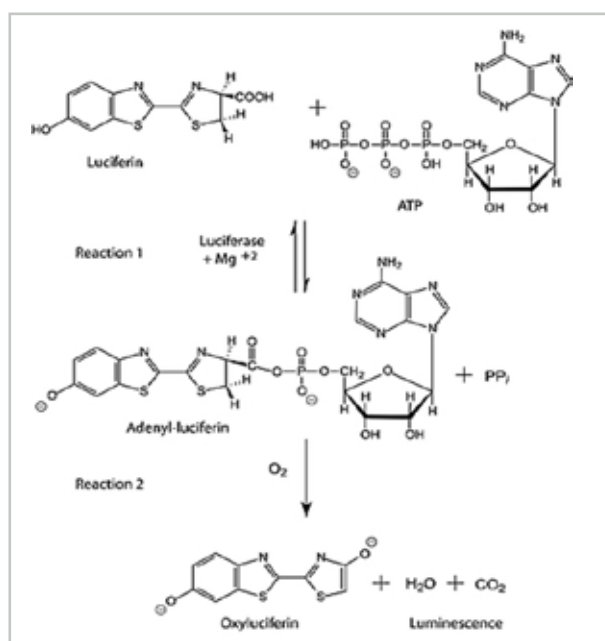
Bioluminescence assay systems have become increasingly used in biology and medical research laboratories in addition to fluorescence and chemiluminescence detection strategies.

Creative BioMart manufactures [Firefly luciferase](#) with highest activity,  $2.0 \times 10^{11}$  RLU/mg, on the market. [Firefly luciferase](#) is a 62 kDa protein that catalyzes the production of light. It has gained tremendous popularity in the study biological systems, because the bioluminescence is sensitive and the reagents are easy to use, especially in listed areas:

- In vivo imaging
- Cell proliferation assays
- Protein folding/secretion analyses
- Reporter gene assays

## Recombinant Firefly Luciferase

Product overview	Recombinant Firefly luciferase produced in E.coli has a molecular mass of approximately 62 kDa.
Purity	>95% as determined by SDS-PAGE.
Specific Activity	More than $2.0 \times 10^{11}$ RLU/mg.
Physical Appearance	Lyophilized powder
Optimum PH	7.0-8.5
PH Stability	6.0-9.0
Storage	-20°C for six months; -70°C for one year.



Firefly luciferase requires ATP, molecular oxygen, and the heterocyclic compound, firefly luciferin, to generate light in a two-step process. The light producing reaction is initiated by luciferin activation and proceeds in the presence of molecular oxygen to yield a photon of yellow-green light.

Creative BioMart also produces [Renilla Luciferase](#) and [Vibrio fischeri Luciferase](#). For further inquiry, please do not hesitate to contact us. We are available in 24/7.

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