

Native Luciferase from Photinus Pyralis

Product Information

Cat#	NATE-1022
Synonyms	Thermostable luciferase, Stabilized luciferase, Modified recombinant firefly luciferase
CAS No.	61970-00-1
Enzyme Commission Number	EC 1.13.12.7
Size	0.1 mL, 0.25 mL, 0.5 mL, 1mL, 2.5 mL
Descriptions	Luciferase, derived from Photinus pyralis, produces a yellow-green light signal by catalyzing the reaction between luciferin and ATP. It is used for highly sensitive detection of cell viability and ATP levels and is suitable for research in cell biology and molecular biology. Firefly luciferase is a highly efficient bioluminescent enzyme that catalyzes the oxidation of the luciferin substrate in the presence of ATP and oxygen, producing yellow-green light with a wavelength of approximately 560 nm.
Applications	Luciferase serves as a key signal-generating reagent for bioluminescent diagnostic systems, enabling ultrasensitive ATP detection, microbial contamination testing and reporter gene-based molecular diagnostic assays.
Form	Clear liquid
Purity	> 90 %
Activity	10 ⁹ U/mg
Unit Definition	One enzyme unit generates one Relative Light Unit (RLU) at 20–25 °C within a 10-second reaction period; detection is performed in 100 µL assay mixture supplemented with 40 pmol ATP and 15 nmol luciferin in Tris-acetate buffer (pH 7.8) using a Berthold Junior Luminometer.
Storage	