

Active Recombinant Renilla reniformis Luciferase (1-311), N-His-tagged

Cat. No. Luciferase-10R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant renilla reniformis LUC (1-311), fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Renilla reniformis
Source	E.coli
ProteinLength	1-311
Description	LUC, also known as luciferase. LUC catalyzes the oxidative decarboxylation of coelenterazine in the presence of dissolved oxygen to yield oxyluciferin, CO ₂ , and blue light. In vivo, the excited state luciferin-luciferase complex undergoes the process of nonradiative energy transfer to an accessory protein, green fluorescent protein, which results in green bioluminescence. In vitro, it emits blue light in the absence of any green fluorescent protein.
Form	Liquid
Bio-activity	Specific activity is >1×10 ⁹ lightunit/mg. One luciferase enzyme unit will produce one Relative Light Unit (RLU) at pH 7.5 at 25 centigrade.
Molecular Mass	38.5 kDa (335aa) Confirmed by MALDI-TOF
AA Sequence	MTSKVYDPEQRKRMITGPQWWARCKQMNVLDSFINYYDSEKHAENAVIFLHGNAA

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SSYLWRHVVPHIEPVARCIIPDLIGMGKSGKSGNGSYRLLDHYKYLTAWFELLNLPKK
 IIFVGHWDWGACLAFHYSYEHQDKIKAIVHAESVVDVIESWDEWPDIEEDIALIKSEEGE
 KMVLENNFFVETMLPSKIMRKLEPEEFAAYLEPFKEKGEVRRPTLSWPREIPLVKGG
 KPDDVQIVRNAYLRASDDLPKMFIESDPGFFSNAIVEGAKKFPNTEFVKVKGLHFS
 QEDAPDEMKGKIKSFVERVLKNEQ

Endotoxin < 1 EU/μg of protein (determined by LAL method)

Purity > 95% by SDS-PAGE

Applications SDS-PAGE, Enzyme Activity

Storage Can be stored at +2 to +8 centigrade for 1 week. For long term storage, aliquot and store at -20 to -80 centigrade. Avoid repeated freezing and thawing cycles.

Concentration 0.5 mg/mL (determined by Bradford assay)

Storage Buffer 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

GENE INFORMATION

Official Symbol Luciferase

Synonyms Luciferase; Coelenterazine h 2-monooxygenase; EC:1.13.12.5; Renilla-luciferin 2-monooxygenase; Renilla-type luciferase

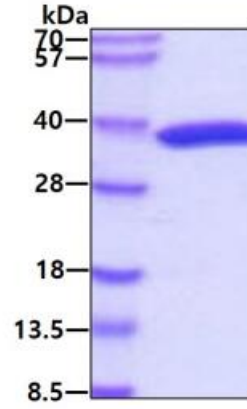
UniProt ID [P27652](https://www.uniprot.org/uniprot/P27652)

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SDS-PAGE



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