

# Recombinant Lucia Luciferase Protein

A coelenterazine luciferase encoded by a synthetic gene

Catalog # rec-lucia-1

<http://www.invivogen.com/recombinant-lucia>

For research use only, not for diagnostic or therapeutic use

Version #17111-MM

## PRODUCT INFORMATION

### Content

10 µg lyophilized Recombinant Lucia Luciferase Protein

### Formulation

10% v/v FBS-containing DMEM culture medium

### Product resuspension

Add 1 ml of 10% v/v FBS-containing culture medium to obtain a concentration of 10 µg/ml

### Storage

- Product is shipped at room temperature. Lyophilized product should be stored at -20°C.

- Upon resuspension, prepare aliquots of product and store at 4°C for 1 month or -20°C for 3 months. Avoid repeated freeze-thaw cycles.

## DESCRIPTION

Recombinant Lucia Luciferase Protein is a monomeric protein expressed in CHO cells. The mature protein is composed of 192 amino acids and has an approximate molecular weight of 24 kDa. Lucia Luciferase is a coelenterazine-utilizing luciferase that can be directly measured in the cell culture medium using bioluminescent assays. Recombinant Lucia Luciferase protein is a positive control for luciferase reporter assays.

## APPLICATIONS

Recombinant Lucia Luciferase protein can be used as an internal positive control and as a reference to produce accurate standard curves with QUANTI-Luc™, a coelenterazine-based luminescence assay reagent.

## RESTRICTIONS

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## METHOD

Below is a protocol for **end-point readings** using a luminometer with an injector, this protocol can be adapted for use with kinetic measurements or a luminometer with a manual set-up.

### Detection of luciferase activity from cell culture medium

1. Dilute recombinant Lucia Luciferase protein in culture medium containing 10% v/v FBS.
2. Prepare QUANTI-Luc™ according to the instructions on the pouch.
3. Set the luminometer with the following parameters: 50 µl of injection, end-point measurement with a 4 second start time and 0.1 second reading time.
4. Pipet 10 µl of sample per well (suggested dose-response range 0.01-100 ng/ml) into a 96-well white (opaque) or black plate, or a luminometer tube.
5. Prime the injector with the QUANTI-Luc™ assay solution and proceed with the measurement.

## RELATED PRODUCTS

Product	Catalog Code
A549-Dual™ Cells	a549d-nfis
HEK-Dual™ TNF-α cells	hkd-tnfa
HEK-Dual™ IFN-γ cells	hkd-ifng
Jurkat-Dual™ (ISG-NF-κB) cells	jkt-d-isnf
pSelect-zeo-Lucia™ (expression plasmid)	psetz-lucia
pNiFty3-Lucia™ (reporter plasmid)	pnf3-lc1
QUANTI-Luc™	rep-qlc1
THP1-Lucia™ NF-κB cells	thp1-nfkb
THP1-Dual™ (NF-κB-ISG) cells	thpd-nfis

For more information about InvivoGen's products see <http://www.invivogen.com>

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