

Renilla Luciferase Assay Reagent (CUST-RLAR-1)

Catalog no.	Size	Description	Price
RLAR-1	1000 assays	Renilla luciferase assay reagent ANR (Add-n-read format)	\$450

Description: The RLAR-1 Assay Kit contains a modified assay buffer with lytic components included, which allows the assay to be used in an ANR (add -n-read) format. This reagent can be directly added to the wells and luciferase activity measured immediately after addition of the reagent.

About Green-emitting Renilla Luciferase

The emission max of the Green-emitting Renilla luciferase (527 nm) makes it ideal for multiplexed assays with blue and red emitting luciferases. This luciferase has been engineered for improved brightness (about 40 times brighter than human codon optimized native Renilla Reniformis Luciferase) and extended stability of the bioluminescent signal, both in vitro and in vivo. The Green-emission maximum of this Renilla mutant offers advantages in multiplexed applications with blue and red-emitting luciferases. Promoter activity can be assessed by quantitating Renilla Luciferase activity in the supernatant media or cell lysates of transfected cells.

Figure 1: Photo-oxidation of coelenterazine catalyzed by Renilla luciferase

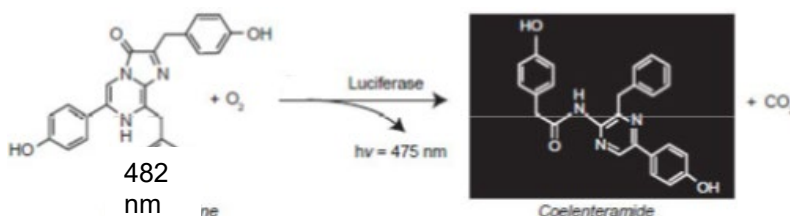
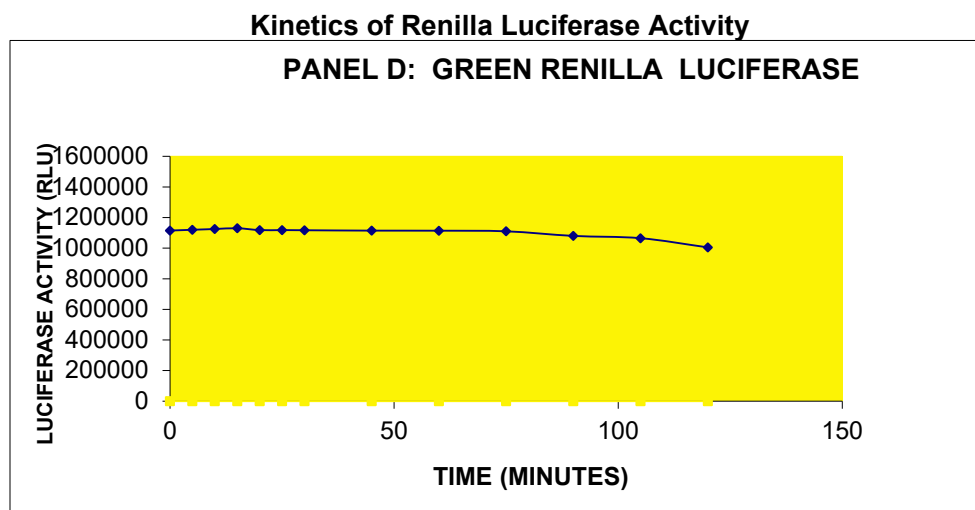


Figure 2: Stability of the Renilla luciferase (RLuc) bioluminescent signal using the CUST-RLAR-1 reagent. This reagent is useful for HTS applications, where a large number of samples need to be assayed..

Note: Data is an average of triplicate determinations measured on a Turner TD2020 luminometer.



Advantages

◆ The Green-emitting Renilla Luciferase is about 40 times brighter than commonly used Firefly and native Renilla Luciferases (human codon optimized) when expressed in mammalian cells under the same promoter, making it an ideal transcriptional reporter (1).

Renilla Luciferase Assay Protocol (RLAR-1)

Kit Components

1. 100ml CUST-RLAR- (Renilla Luciferase Assay reagent) Dilution Buffer (Store at 4 ° C)
2. 1 ml Coelenterazine substrate (100X), (Store tightly capped at -20°C)

Assay Protocol

Make sure all buffers are at room temperature prior to assay.

1. Dilute the concentrated coelenterazine (100X RLAR substrate), provided as a 100X formulation, to 1X using the CUST-RLAR assay dilution buffer. *For example:* To prepare 5 ml of assay reagent dilute 50 ul of 100 X coelenterazine with 4.95 ml of RLAR assay dilution buffer. Mix well. This is the working CUST-RLAR reagent
2. Add a volume of RLAR-1 reagent equal to volume of culture medium (for eg 100 ul of working RLAR reagent is directly to cells in 96-well dishes). Mix well.
3. Assay in luminometer. Integrate for 1-5 seconds
4. Alternately you can mix 5-20 ul of Renilla lysate (prepared by lysing cells with the Cell lysis reagent from Targeting Systems) with 100 ul of the working RLAR-1 reagent, Mix well and read in the luminometer

For more information call our tech support team at 1-866-818-2446, or email us at info@targetingsystems.com
Please check our website <https://www.targetingsystems.net/drug-discovery.php> for dual/triple luciferase assays.

RELATED LUCIFERASE ASSAY REAGENTS

Catalog no.	Size	Description	Price
SINGLE LUCIFERASE ASSAYS			
GAR-1	1000 assays	Gaussia Luciferase Assay	\$400
GAR-2B	1000 assays	Gaussia Luciferase Assay (Stable version)	\$420
RLAR-1	1000 assays	Renilla Luciferase Assay reagent	\$450
VLAR-2	1000 assays	Cypridina Luciferase Assay reagent	\$440
FLAR-1	1000 assays	Firefly Luciferase Assay Reagent	\$400
DUAL LUCIFERASE ASSAYS			
DLAR-1	1000 assays	Gaussia-Red Firefly Luciferase	\$850
DLAR-2	1000 assays	Renilla- Firefly Luciferase	\$850
DLAR-3	1000 assays	Cypridina-Red Firefly Luciferase	\$850
DLAR-4	1000 assays	Cypridina-Gaussia Luciferase	\$850
TRIPLE LUCIFERASE ASSAYS			
TLAR-1	1000 assays	Cypridina-Green Renilla-Red Firefly Luciferase Assay Reagent	\$1200
TLAR-2	1000 assays	Cypridina Luciferase Gaussia Luciferase, red Firefly Luciferase Assay reagent	\$1200