

# Product Information

## 1X Passive Lysis Buffer 2.0

**Catalog Number:** 99821-100mL

**Unit Size:** 100 mL

### Storage and Handling

Store at -20°C or below. The buffer is stable for at least 12 months from date of receipt when stored as recommended. The buffer is stable to three freeze-thaw cycles.

### Product Description

1X Passive Lysis Buffer 2.0 is a cell lysis buffer that is designed for use with Biotium's Firefly & *Renilla* Luciferase Single Tube Assay Kit (catalog no. 30081) That kit is supplied with sufficient 1X Passive Lysis Buffer 2.0 to perform the stated number of assays with cells grown in 96 – 24 well plates. 1X Passive Lysis Buffer 2.0 is sold separately for use with the kits when more lysis buffer (e.g. >100 uL/well) is required. The buffer also can be used to dilute recombinant firefly or *Renilla* luciferase enzymes without the need to add BSA to stabilize the enzymes.

Note: If additional lysis buffer is required for Firefly Luciferase Assay Kit 2.0 or Firefly Luciferase Assay (Lyophilized), purchase 5X Firefly Lysis Buffer, catalog no. 99923. If additional lysis buffer is required for *Renilla* Luciferase Assay Kit 2.0, purchase 5X Passive Lysis Buffer, catalog no. 99912.

### Assay Protocol

#### Preparation of cell lysates

Note: 1X Passive Lysis Buffer 2.0 is ready to use without dilution.

1. Remove the growth medium from the cultured cells and gently wash the cells once with a sufficient volume of phosphate buffered saline (PBS) to cover the surface of the culture vessel. Remove the PBS and add 1X Passive Lysis Buffer 2.0 using the volume recommended below for each type of well:

Wells/plate	Lysis buffer/well
6 well	500 uL
12 well	250 uL
24 well	100 uL
48 well	65 uL
96 well	20 uL

2. Place the culture plates on a rocking platform or orbital shaker with gentle rocking/shaking to ensure complete and even coverage of the cell monolayer with 1X passive lysis buffer. Rock the culture plates at room temperature for 15 minutes.

Note: Cultures that are overgrown are often more resistant to complete lysis and typically require an increased volume of passive lysis buffer and/or an extended treatment period to ensure complete lysis and/or scraping cells off the culture plates. Biotium offers mini cell scrapers (cat. no. 22003) for harvesting lysates from 96-, 24-, and 48-well plates.

Note: 1X Passive Lysis Buffer 2.0 contains protein stabilizers that may affect results of protein quantitation assays.

3. Transfer the lysate to a tube or vial. Optional: the lysate can be cleared by centrifugation for 30 seconds at top speed in a refrigerated microcentrifuge and transferred into a new tube. Place at 4°C until ready to assay. Store lysates at -20°C or -70°C if assay will not be performed on the same day.
4. To assay lysates in the Firefly & *Renilla* Luciferase Single Tube Assay, follow the protocol provided with the kit.

### Related Products

Catalog number	Product
22003	Mini Cell Scrapers, pack of 200
30081	Firefly & <i>Renilla</i> Luciferase Single Tube Assay Kit
30085	Firefly Luciferase Assay Kit 2.0
30075	Firefly Luciferase Assay Kit (Lyophilized)
30082	<i>Renilla</i> Luciferase Assay Kit 2.0
30028	Steady-Luc™ Firefly HTS Assay Kit
30028L	Steady-Luc™ Firefly HTS Assay Kit (Lyophilized)
30020	ATP-Glo™ Bioluminometric Cell Viability Assay
99923	5X Firefly Lysis Buffer (for catalog nos. 30085 and 30075)
99912	5X Passive Lysis Buffer (for catalog no. 30082)