Product Datasheet

LightSwitch Luciferase Assay Reagent
NBP2-25287-10ml

Unit Size: 10 ml

Store at -20C. Avoid freeze-thaw cycles.

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Updated 6/15/2014 v.20.1

NBP2-25287-10ml

LightSwitch Luciferase Assay Reagent

Product Information	
Unit Size	10 ml
Concentration	Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Buffer	

Product Description	
Preparation Method	1) Reconstitute 100X Substrate. Add 1mL Substrate Solvent to tube of lyophilized Assay Substrate. Dissolve completely. Protect from light and minimize time at room temperature. 100x Substrate may be stored at -20C and protected from light for 2-3 weeks. For best results, use freshly reconstituted substrate. 2) Prepare Assay Solution (for 1000 tests). Thaw 100mL bottle of Assay Buffer in room temperature water bath and add 1mL of reconstituted 100x Substrate just prior to use. Prepare Assay Solution (buffer + substrate mix) fresh for each use and use within 2-3 hours. To assay fewer wells, make up only what you need and store remaining substrate and buffer separately at -20C. For best results, avoid additional freeze-thaw cycles. To thaw re-frozen buffer, incubate in a warm (37C) water bath for at least 1 hour and mix well to ensure that all components go back into solution. 3) Add Assay Solution to wells. Use a multi-channel pipettor to add 100uL Assay Solution (buffer + substrate) directly to each sample well (100uL cells + media) in a white 96-well plate. The Assay Buffer also serves as a lysis buffer. If cells were grown in another plate or flask, transfer samples to a white 96-well plate in 100uL total volume (media or PBS). 4) Incubate for 30 minutes at room temperature. Cover plate and protect from light. If assaying more than one plate, stagger addition of Assay Solution so that each plate incubates for 30 minutes before reading. Read each well for 2 seconds in a plate luminometer. A recommended luminometer is the SpectraMax L (Molecular Devices)
Kit Components	Substrate Solvent, Assay Buffer, Lyophilized Assay Substrate (100X)

Procedures

Product Handling Protocol (NBP2-25287)
Note: Luciferase assays may be conducted immediately or the plates may be frozen at -80C (freezing generally increases cell lysis and luciferase signal). If using frozen plates, thaw and bring to room temperature before assaying.

1) Reconstitute 100X Substrate.
Add 1mL Substrate Solvent to tube of lyophilized Assay Substrate. Dissolve completely. Protect from light and minimize time at room temperature. 100x Substrate may be stored at -20C and protected from light for 2-3 weeks. For best results, use freshly reconstituted substrate.

2) Prepare Assay Solution (for 1000 tests).
Thaw 100mL bottle of Assay Buffer in room temperature water bath and add 1mL of reconstituted 100x Substrate just prior to use. Prepare Assay Solution (buffer + substrate mix) fresh for each use and use within 2-3 hours. To assay fewer wells, make up only what you need and store remaining substrate and buffer separately at -20C. For best results, avoid additional freeze-thaw cycles. To thaw re-frozen buffer, incubate in a warm (37C) water bath for at least 1 hour and mix well to ensure that all components go back into solution.

3) Add Assay Solution to wells.
Use a multi-channel pipettor to add 100uL Assay Solution (buffer + substrate) directly to each sample well (100uL cells + media) in a white 96-well plate. The Assay Buffer also serves as a lysis buffer. If cells were grown in another plate or flask, transfer samples to a white 96-well plate in 100uL total volume (media or PBS).

4) Incubate for 30 minutes at room temperature.
Cover plate and protect from light. If assaying more than one plate, stagger addition of Assay Solution so that each plate incubates for 30 minutes before reading.

5) Read each well for 2 seconds in a plate luminometer.
A recommended luminometer is the SpectraMax L (Molecular Devices)

MSDS (NBP2-25287)
LightSwitch Luciferase Assay Reagent
LS010 (10mL) & LS100 (100mL)

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product information

Commercial Product LightSwitch Luciferase Assay Reagent
Name: LS010 (10mL) & LS100 (100mL)
Intended use: Biochemical Reagent

This is a summary MSDS for a kit.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Kit Components

LightSwitch Assay Reagent Substrate
No known OSHA hazards

LightSwitch Assay Reagent Buffer
Target Organ Effect

LightSwitch Assay Reagent Solvent

Flammable liquid, Target Organ Effect, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption, Irritant

3. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Flammable liquid, Target Organ Effect, Toxic by inhalation, Toxic by ingestion, Toxic by skin absorption, Irritant

Target Organs
Kidney, Eyes, Liver, Heart, Central nervous system

GHS Classification
Flammable liquids (Category 2) Acute toxicity, Oral (Category 3)
Acute toxicity, Inhalation (Category 3) Acute toxicity, Dermal (Category 3) Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity - single exposure (Category 1)

3. HAZARDS IDENTIFICATION (continued)

GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor.
H301 + H311 Toxic if swallowed or in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H370 Causes damage to organs.

Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P280 Wear protective gloves/ protective clothing.
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.

HMIS Classification
Health hazard: 2
Chronic Health Hazard: *
Flammability: 3
Physical hazards: 0

NFPA Rating
Health hazard: 2

Fire: 3
Reactivity Hazard: 0

4. FIRST AID MEASURES

Refer to component MSDS

5. FIRE-FIGHTING MEASURES

Refer to component MSDS

6. ACCIDENTAL RELEASE MEASURES

Refer to component MSDS

7. HANDLING AND STORAGE

Storage: Recommended storage temperature: -20 degrees C.
Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to component MSDS

9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component MSDS

10. STABILITY AND REACTIVITY

Refer to component MSDS

11. TOXICOLOGICAL INFORMATION

Refer to component MSDS

12. ECOLOGICAL INFORMATION

Refer to component MSDS

13. DISPOSAL CONSIDERATIONS

Refer to component MSDS

14. TRANSPORT INFORMATION

DOT (US)
UN number: 3316 Class: 9
Proper shipping name: Chemical kits
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
UN number: 3316 Class: 9
EMS-No: F-A, S-P
Proper shipping name: CHEMICAL KIT
Marine pollutant: No

IATA
UN number: 3316 Class: 9
Proper shipping name: Chemical kit

15. REGULATORY INFORMATION

Labeling according to EC-Directives

Note: This product must be labeled in accordance with EEC directive 67/548 and 99/45. The small quantity of hazardous material (ETOH) being shipped qualifies the product under the small quantity exception descriptions for both domestic and international shipping (49 CFR 173.4 and IATA DGR 2.7.4.2) which permit small packages of hazardous materials to be unlabelled with the hazardous identification information given in the Material Safety Data Sheet.

OSHA Hazards Flammable liquid, Target Organ Effect, Toxic by inhalation., Toxic by ingestion, Toxic by skin absorption, Irritant

SARA 311/312 Hazards Fire Hazard, Acute Health Hazard, Chronic Health Hazard

16. OTHER INFORMATION

Further information

The information herein is believed to be correct as of the date hereof, but is provided without warranty of any kind, does not purport to be all inclusive, and shall be used only as a guide. The recipient of our product is responsible for ensuring that, where applicable, existing laws and guidelines are observed. The information is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Novus Biologicals shall not be held liable for any damage resulting from handling or from contact with the above product.

The small quantity of hazardous material (ETOH) being shipped qualifies the product under the small quantity exception descriptions for both domestic and international shipping (49 CFR 173.4 and IATA DGR 2.7.4.2) which permit small packages of hazardous materials to be unlabelled with the hazardous identification information given in the Material Safety Data Sheet.

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Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Support products are guaranteed for 6 months from date of receipt.

For more information on our guarantee, please visit www.novusbio.com/guarantee.