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Product Information

Bioluminescence Demonstration Kit

Product Code **BL0100**

Storage Temperature $-20\text{ }^{\circ}\text{C}$

TECHNICAL BULLETIN

Product Description

Luminescence (light) is produced from the reaction of luciferin, adenosine-5'-triphosphate, and oxygen when the reaction is catalyzed by the enzyme luciferase in the presence of magnesium ions. The firefly tail powder and lantern extract contain the luciferin and luciferase.

The darker the room, the more dramatic the demonstration will be. If possible, allow time for eyes to adjust to the darkness before combining reagents.

Components

Reagents provided are sufficient for 15 demonstrations.

Adenosine 5'-Triphosphate Product Code A 3727 Each vial contains 1 mg of ATP, disodium salt, and 40 mg of magnesium sulfate	15 vials
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Firefly Lantern Extract Product Code F 6303 Each vial contains soluble extract from 100 mg of dried lanterns. After reconstituting with 5 ml of water, the solution will contain 50 mM potassium phosphate, pH 7.4, and 20 mM MgSO_4	5 vials
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Precautions and Disclaimer

This product is for laboratory research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage

It is recommended to store the kit at $-20\text{ }^{\circ}\text{C}$.

Procedure

1. Reconstitute 1 vial of the Firefly Lantern Extract (Product Code F 6303) with 5 ml of water.
2. Shake vial to dissolve contents.
3. In semi-darkness, pipette 1.5 ml or approximately 1/3 of the reconstituted solution in the vial from step 1, into a vial of Adenosine 5'-Triphosphate (Product Code A 3727).

Luminescence will result at once. The light will gradually fade and practically disappear in 5 to 10 minutes.

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