

StayBrite™ Highly Stable Luciferase/Luciferin Reagent

(Cat# K790-100, -1000, -10000; Store at -80°C)

I. Introduction:

BioVision's Highly Stable Luciferase/Luciferin Reagent utilizes a genetically modified variant derived from the Luciferase of *Diaphanes pectinealis* (Chinese Firefly) endemic to Yunnan province, China. BioVision's luciferase (rLucHS) has been modified to provide enhanced stability compared to the normal phenotype of *Photinus pyralis*, as well as a broader and more physiologically relevant effective pH range. At all pHs below ~ 8.2, rLucHS is significantly more active than commercial *Photinus pyralis* luciferase and is stable for weeks at room temperature and > 60 min at 37°C. The specific activity of rLucHS is ~ 5 x 10¹¹ RLU/mg protein. This reagent has application to measure ATP levels in a wide variety of biological samples such as cells, tissues and fermentation broth, etc.

II. Components:

Component	K790-100	K790-1000	K790-10000	Part Number
StayBrite™ Storage Buffer	1.2 ml	12 ml	120 ml	K790-xxx(xx)-1
rLucHS Reagent Mix	1 vial	1 vial	1 vial	K790-xxx(xx)-2

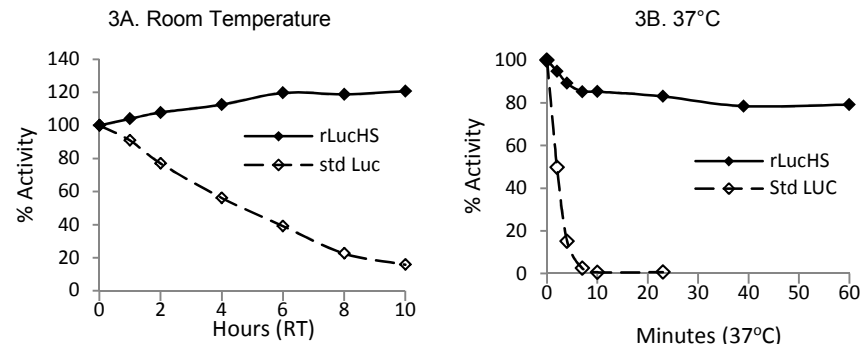
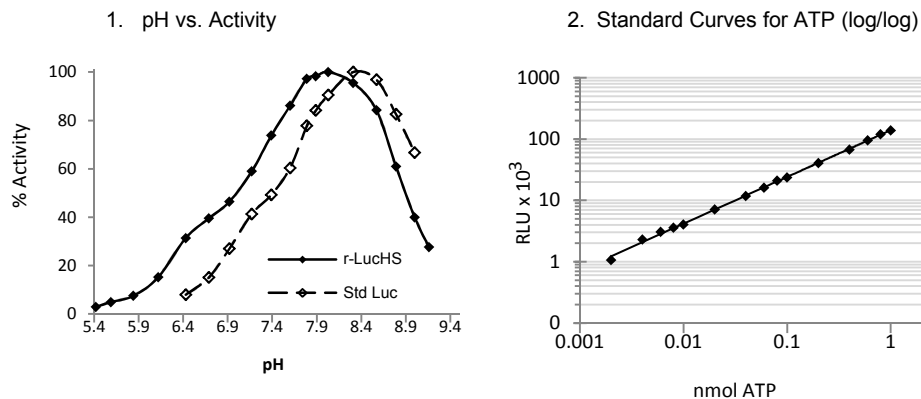
III. Storage and Handling:

- Store vials at -80°C, protected from light; good for 1 year.

IV. StayBrite™ Highly Stable Luciferase/Luciferin Reagent Preparation:

- Reconstitute rLucHS Reagent Mix with StayBrite™ Storage Buffer (1.1 ml, 11 ml, or 110 ml, respectively, for the K790-100, -1000, -10000). The reconstituted reagent can be used for ATP assay or potentially other assays. The reagents can be stored at 4°C for 2 months at 4°C. For a detail ATP assay protocol, please refer to BioVision's Cat.# K791-100, -1000).

V. Selected Properties of rLucHS:



3. rLucHS Stability at RT (3A) and 37°C (3B) vs. Standard Commercial Luciferase

VI. RELATED PRODUCTS:

- ADP Colorimetric/Fluorometric Assay Kit (Cat. No. K355-100)
- ADP/ATP Ratio Assay Kit (K255-200)
- ATP Cell Viability Assay Kit (Cat. No. K254-200)
- ATP Colorimetric/Fluorometric Assay Kit (Cat. No. K354-100)
- Bioluminescence Cytotoxicity Assay Kit (K312-500)
- Luciferase Polyclonal Antibody (Cat. No. 3848-500)
- Luciferase Reporter Assay Kit (K801-200)
- StayBrite™ Highly Stable Recombinant Luciferase (Cat. No. 7901-150)
- StayBrite™ D-Luciferin, Sodium Salt (K7902-100, -1G, -10G)
- StayBrite™ Highly Stable ATP Assay Kit (Cat. No. K791-100,-1000)

VII. OTHER FEATURED PRODUCTS:

- Apoptosis Detection Kits & Reagents
- Annexin V Kits & Bulk Reagents
 - Caspase Assay Kits & Reagents
 - Mitochondrial Apoptosis Kits & Reagents
 - Nuclear Apoptosis Kits & Reagents
 - Apoptosis Inducers and Set
- Cell Fractionation System
- Mitochondria/Cytosol Fractionation Kit
 - Nuclear/Cytosol Fractionation Kit
 - Membrane Protein Extraction Kit
 - Cytosol/Particulate Rapid Separation Kit
 - Mammalian Cell Extraction Kit
 - FractionPREP Fractionation System
- Cell Proliferation & Senescence
- Quick Cell Proliferation Assay Kit
 - Senescence Detection Kit
 - LDH-Cytotoxicity Assay Kit
 - Live/Dead Cell Staining Kit
 - Metabolism Assays
 - Growth Factors & Cytokines