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Datasheet for UniGlow-0100

UniGlow™ - One Component Chemiluminescent Substrate

Overview

Description:	UniGlow™ - One Component Chemiluminescent Substrate - UniGlow-0100
Item No.:	UniGlow-0100
Size:	100 mL
Applications:	ELISA, Microarray, WB

Product Details

Background:	Enhanced Chemiluminescence (ECL) involves the enzymatic oxidation of luminol, a process that is catalyzed by peroxidase (HRP) enzyme. In the presence of HRP and a peroxide, luminol is oxidized, and emits light. The intensity of the emitted light is proportional to the amount of HRP-bound target, allowing for the quantitative detection of proteins.
Synonyms:	Western blot detection, chemiluminescent substrate One Component System, luminol-based chemiluminescent substrate for horseradish peroxidase (HRP) detection

Target Details

Relevant Links:

- UniGlow SDS

Application Details

Suggested Applications:	ELISA, Microarray, WB (Based on references)
Application Note:	UniGlow™ is a highly sensitive, nonradioactive, enhanced luminol-based, chemiluminescent, ready-to-use peroxidase (HRP) substrate and no mixing is required. UniGlow™- One Component Chemiluminescent Substrate is for use in microwell or membrane applications. Protect from light - UniGlow™ Substrate is a highly sensitive detection reagent allowing for the detection of picograms (6-12 pg) amounts of antigen. Equilibrate to room temperature before use and aliquot into a clean container. Use ~100µL/cm2 of membrane. Optimal detection visualized after contact of substrate with HRP enzyme on membrane for ~1-10min. Blot off excess substrate before imaging. Always carefully optimize all components of individual assays (antigens, antibodies, conjugates…) to minimize background reactivity associated with non-specific binding.

Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1X
WB:	1X
Other:	DOE: 05/10/2025

Formulation

Physical State:	Liquid - light red colored
Concentration:	1 X

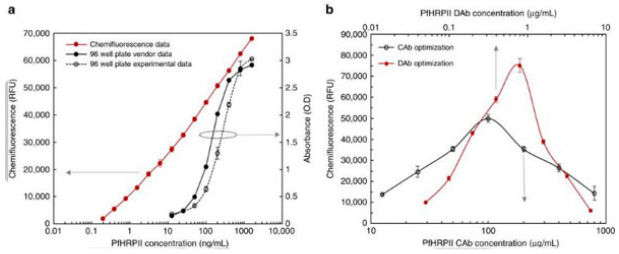
Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store container at 4° C prior to opening. Protect from moisture and light. No special shipping conditions or precautions are required.
Expiration:	Expiration date is two (2) years from date of receipt.

Images

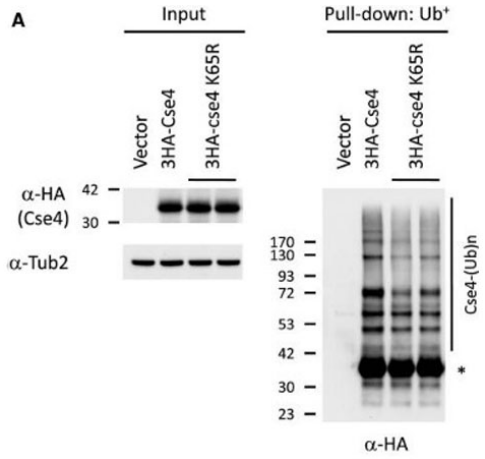


Bottle
UniGlow™ - One Component Chemiluminescent Substrate



ELISA

Optimization results of the assay reagents. a 96 well plate assay results plotted on the right axis and Chemifluorescence assay result obtained from Optimizer™ microfluidic microplate is plotted on the left axis showing lower LOD and higher dynamic range and b Chemifluorescence signal output variation with increase in PfHRP2 capture antibody (CAb) concentration (bottom axis) and increase in PfHRP2 detection antibody (DAb-HRP) concentration (top axis) at a fixed DAb-HRP concentration (0.1 µg/mL) and at a fixed CAb concentration (100.0 µg/mL), respectively. Each point represents the mean of three replicates. Fig. 4. PMID: 34567620.



Western Blot

Cse4 ubiquitination is reduced in a cse4 K65R mutant. (A) Protein extracts were prepared from wild-type strain (BY4741) transformed with vector (pMB433), pGAL-3HA-CSE4 (pMB1458), or pGAL-3HA-cse4 K65R (pMB1791) grown in raffinose/galactose (2%) for 4 hr to induce expression of Cse4. Agarose-TUBE1 was used to pull down tandem ubiquitin binding entities and ubiquitination levels of Cse4 were detected by western blot analysis with anti-HA antibody. Input samples were analyzed using anti-HA (Cse4) and anti-Tub2 antibodies. Asterisk shows non-modified Cse4. One Component Chemiluminescent Substrate (p/n UniGlow-0100). Figure 2. PMID: 29432128.

References

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- Ohkuni K et al. N-terminal sumoylation of centromeric histone H3 variant Cse4 regulates its proteolysis to prevent mislocalization to non-centromeric chromatin. *G3 (Bethesda).* (2018)
- Shrestha RL et al. Mislocalization of centromeric histone H3 variant CENP-A contributes to chromosomal instability (CIN) in human cells. *Oncotarget.* (2017)

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