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## PRODUCT DATA SHEET

Part number(s): K-12042-D10

### WesternBright™ Quantum

Chemiluminescent HRP Substrate

#### Product description:

Two-component substrate for chemiluminescent detection of Western blots. The kit is compatible with secondary antibodies conjugated with Horseradish Peroxidase.

The kit allows to prepare up to 100ml of the final working substrate solution.

To prepare the working formulation, mix equal volume aliquots of each component.

#### Components and storage conditions:

R-03026-C50 Component 1 (luminol/enhancer solution) 50 ml

Almost colorless to slightly colored solution packaged in amber polyethylene bottle.

R-03025-C50 Component 2 (stabilized peroxide solution) 50 ml

Colorless solution packaged in clear (natural) polyethylene bottle. Solution is typically clear, however some amorphous white precipitation may occur. The precipitate does not affect the performance of the product. If present, do NOT remove or filter out the precipitate. Removing it may reduce the shelf life.

Both reagents should be stored at room temperature.

Do NOT refrigerate. Refrigerated storage REDUCES shelf life.

If reagents were refrigerated, equilibrate at room temperature for at least 24 hours before opening bottles.

#### Shelf life:

Unopened components are stable at least for one year after the delivery to the end user, if stored at room temperature. Storage at +4°C may DECREASE the shelf life.

#### Shipping conditions:

Shipping at ambient temperature.  
All shipping methods are acceptable.

#### Quality control analysis and expected results:

In addition to all manufacturing in-process control tests, the reagents are tested by incubation for 2 minutes with nitrocellulose strips containing eight serial dilutions of secondary antibody conjugated with HRP in the range from 5ng to 40pg followed by imaging in a CCD digital imager.

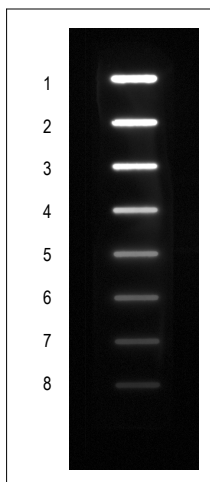
In standard imaging conditions with acquisition time below 10 seconds seven out of eight bands should be clearly observed.

The signal intensity from the seventh band (78pg) should be quantitatively detected with signal-to-noise ratio at least above 10.

Intensities of all bands fit into linear regression without producing any outliers.

Both reagents included in the kit may be tested together or separately in combination with a previously tested component that has passed the quality control test.

#### Typical result of the functional test.



The image on the left is obtained with a CCD imager (Fluorchem Q) using the following settings:

Lens aperture setting: 2

Exposure time: 8s

Similar images can be obtained using various CCD imagers available on the market and capable of capturing chemiluminescent light generated by luminol – HRP system.