

The Western Blot method is one of the most widely used methods in scientific research for the **detection and identification of proteins expression level** in a sample.

The revealing step with highly sensitive and stable detection reagents allows an optimal quantitative analysis of the proteins.

Covalight®'s family reagents are non-isotopic luminol-based chemiluminescence substrate, designed for the chemiluminescent detection of immobilized proteins and immobilized nucleic acids conjugated with horseradish peroxidase (HRP).

This wide range combines a high sensitivity and a long-term signal which makes Covalight[®]'s family reagents the perfect choice for your Western and Dot Blot analysis.

PRINCIPLE

Chemiluminescence is a chemical reaction that produces energy released in the form of light.

Indeed, in the presence of hydrogen peroxide (H2O2) and an enhancer, the horseradish peroxidase enzyme (HRP) coupled to the secondary antibody, catalyzes the oxidation of the substrate, such as Luminol, to an excited reaction product which emits light on spontaneous decay to a more stable form.



A COMPLETE RANGE MEETING ALL YOUR NEEDS



Ultra sensitive: detects proteins quantities from Mid picogram to Low femtogram (10^{-15})

Durable signal for several hours after incubation

Reduced antibody consumption: fast and effective detection using highly diluted antibodies concentrations (*see Products table*)

Stable reagents for 1 year at RT, except Covalight[®] at $+4^{\circ}$ C

Suitable solutions for revelation with light-sensitive X-ray film or with CCD-based imaging



 Covalight* Plus - Covalab

 Amersham** ECL Prime** - GE Healthcare

 SuperSignal** West PICO PLUS - Thermo Scientific**

 Clarity** - BioRad

Fg 2: Western Blotting of HDAC-1 on Hela cell lysate from 5 µg to 0,016 µg of total protein. Revealed with Covalight* Plus and other chemiluminescent substrates with an exposure time of 2 minutes. Antibodies dilution : Primary anti-human HDAC-1 (1:5 000) and secondary anti-rabbit (1:75 000)

 Covalight** Xtra - Covalab

 Amersham** ECL Select*** - GE Healthcare

 SuperSignal** West Fermto - Thermo Scientific**

 Clarity Max** - BioRad

PRODUCTS

APPLICATIONS

| Products | Detection Level | Signal Duration | Signal Intensity | Quantities | Antibodies Dilution (1mg/ml) | ID Covalab | Ref. |
|--|---------------------------------------|--------------------|---------------------|--|---|---------------|----------|
| Covalight [®] ECL Reagent | Mid Picogram (10 ⁻¹²) | 6h | Standard | 250 ml Peroxide solution 15 ml Luminol-Enhancer solution | Primary Ab = 1:100 - 1:5 000 Secondary Ab = 1:1 000 - 1:15 000 | opr0009 | 00006366 |
| Covalight [®] Plus ECL Reagent | Mid Femtogram (10 ⁻¹⁴) | > 24h | High | 125 ml Peroxide solution 125 ml Luminol-Enhancer solution | Primary Ab = 1:1000 - 1:15 000 Secondary Ab = 1:10 000 - 1:150 000 | opr1102 | 00118073 |
| Covalight® Xtra ECL Reagent | Low Femtogram (10 ⁻¹⁵) | 8h | Extreme | 50 ml Peroxide solution 50 ml Luminol-Enhancer solution | Primary Ab = 1:5 000 - 1:100 000 Secondary Ab = 1:10 000 - 1:500 000 | opr1101 | 00118076 |



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