Mo Bi Tec
MOLECULAR BIOLOGISCHE TECHNOLOGIE

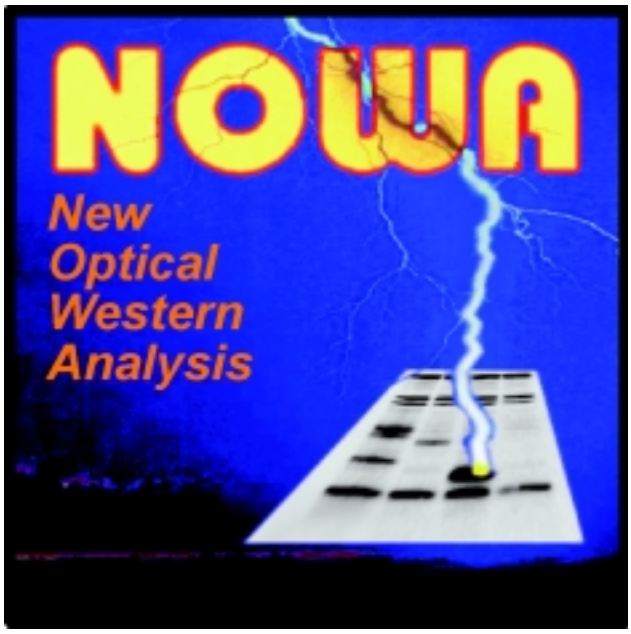
Product Information

NOWA01 NOWA

Highly sensitive detection system for HRP-conjugated antibodies

General Description

NOWA (New Optical Western Analysis) is a highly sensitive detection system for HRP-conjugated antibodies in the picogramm range. It enables a sensitivity that is significantly higher than that of other leading chemiluminescence kits.
The kit is based on the emission of light during a reaction which is started by free oxygen produced by the enzymatic activity of HRP. Using a newly developed enhancer cascade the light emission is amplified by a factor of at least one thousand. The NOWA kit contains two solutions that are combined and used to incubate the nitrocellulose or PVDF filter. After one minute of incubation time, the filter is ready to be exposed to an X-ray film. Typical exposure times range between 10 seconds and 5 minutes. The light-emitting reaction continues for about 1 hour to allow as many exposures as you may need. The shelf life of the NOWA kit is at least 12 months when stored at 4°C. The kit contains 2 x 250 ml and is sufficient for 10,000 cm^2 (1 m^2) of NC or PVDF membrane



Protocol

STEP BY STEP

- After the incubation with the HRP-coupled antibody wash the filter 3 x 10 minutes in $PBS_{0,1\%\ Tween}$.
- Prepare a mixture of equal volumes of **NOWA** solution **A** and **B**.
  Never use the same pipet tip for both bottles!
  It is sufficient to prepare a total volume of 50 µl per cm^2 blotting filter.
- Remove the filter from the washing solution, air dry briefly and place it top side up on a piece of saran wrap.
- Disperse the combined **NOWA** solutions on the filter and incubate at room temperature for one minute. (The clingwrap prevents flown of the solution and helps to keep it on the filter.)
- Take the filter with tweezers and let the solution drip off. Wrap it in a fresh piece of saran wrap. Avoid air bubbles between the top side of the filter and the clingwrap.
- Fix the wrapped filter in an exposure cassette with tape and immediately expose to an X-ray film in a darkroom.
- The exposure time lies between 1 and 5 minutes, but can be as short as a few seconds in some cases. Different intensities can be achieved by placing two films on top of each other on the filter at the same time.
- Although more than one exposure is possible the intensity of the light-emitting reaction slowly decreases. The duration of the reaction can be prolonged by placing a **NOWA** drained Whatman filter under the NC filter.

General Consideration:

- Store reagents at 4°C.

Order Information, Shipping & Storage

order #	description	amount
NOWA01	NOWA Kit	1

shipped at RT; store at 4°C.