For research purpose only. Not for use in diagnostic procedures for clinical purposes. For IN VITRO USE ONLY.

WEST-ZOL® (plus) Western Blot Detection System

Cat. No. **16021** Total 200ml (A, 100ml; B, 100ml)

DESCRIPTION

WEST-ZOL® (plus) Western Blot Detection System of iNtRON is a light emitting non-radioactive method for detection of immobilized specific antigens thorough horseradish peroxidase-labeled antibodies. The HRP (horseradish peroxidase) bound to an antibody induce chemilluminescence which is detected on X-ray film.

Principles of WEST-ZOL® (plus) is that hydroxide ion (OH^-) generated by horseradish peroxidase in aprotic media result in transition of luminol to 3'-aminophthalate, which induce emission of 425-510nm light. The X-ray film exposed to the light show a specific protein band.

The WEST-ZOL® (plus) has greater sensitivity and longer signal duration than WEST-ZOL®.

CHARACTERISTIC

- *Simple step* : WEST-ZOL® (plus) has very simple step, which consist of reaction detection solution and membrane blot and exposure to X-ray film.
- *Rapid reaction time* : Specific protein detection may be achieved in less than 1-10 minute.
- *High sensitivity* : WEST-ZOL® (plus) is able to detecting less than 1-2 pg of antigen on membrane blot, at least 815x more sensitive than WEST-ZOL®.
- *High resolution* : WEST-ZOL® (plus) generate high contrast signal.
- *Long duration time* : Signal duration time of WEST-ZOL® (plus) is 715x longer than that of WEST-ZOL®.

STORAGE

Store at 4℃, and then stable for more than 1 year

KIT CONTENTS

- Solution A : WEST-ZOL® (plus) Substrate Solution 100ml
- Solution B : WEST-ZOL® (plus) Enhancer Solution 100ml

PROTOCOL

On using WEST-ZOL® (plus) Western Detection System, it is essential to optimize the concentrations of both primary and secondary antibodies, for results with high signal and low background.

1. Mix an equal volume of detection Solution A and Solution B to give sufficient to cover the membranes and add the detection reagent to the protein side of the membrane.
   Note : The volume of 2ml is sufficient for membrane of 25㎠ (5cm X 5cm).
2. Incubation for 1 minute at room temperature without agitation.
   Note : The reaction for 1 minute is sufficient for detection of specific protein.
3. Drain off excess detection reagent by holding the membrane vertically and touching the edge of the membrane against tissue paper.
   Note : For less background, excess detection reagent on membrane have to be removed.
4. Wrap membranes in Saran Wrap and gently smooth out air pockets. And then place the blots, protein side up, in the film cassette.
   Note : It is necessary to work quickly once the membranes have been exposed to the detection system.
5. Switch off the lights and carefully place a sheet of X-ray film on top of the membranes, close the cassette and expose for dozens of minutes.
   Note : Do this in a dark room using red safelight. How long to continue the exposure depend on the amount of target protein on the membrane. Exposure from 30 seconds to 5 minutes is sufficient to detection of abundant protein. Rare protein require more exposure time.