

PRODUCT DATA SHEET

Product Name **Antibody Diluent W**

Product Code **# APO501050 50 ml**
 # APO501125 125 ml
 # APO501500 500 ml

Product Description

All antibodies used in Western Blot (or other solid phase immunoassay) produce some background staining caused by:

- Interaction of antibody (and fragments of its degradation, especially typical for preparations of polyclonal antibodies purified on affinity column) with free membrane
- Interaction of serum, antibody, or its fragments, with charged fragments of proteins that were transferred to the membrane.

Blocking of the membrane (i.e with Western Block) prevents this only partially, as during incubation of blot with specific primary and secondary antibody there occurs replacement of the blocking agent with antibody, and non-specific binding of antibody to denaturated (or only partially renaturated) proteins transferred to a membrane.

This background decreases the sensitivity of your assay by decreasing the ratio of specific signal to noise. Additional result may be visibility on the blot of non-specifically detected proteins.

Antibody Diluent W is a multi-component solution that can dramatically increase the sensitivity of your Western Blot, when used as diluent for the primary (and in some cases – secondary) antibody. In actual tests of the preparation in immunofluorescent detection of protein spots on membrane the use of Antibody Diluent W improved signal to noise ratio more than 5 times.

Using ADW allows you to use higher concentration of specific antibody, use longer exposure for blots with luminescent or fluorescent detection system, and improves the specificity of the results obtained.

It also allows shorten the detection times by incubating blot with specific antibodies at +37°C for 1-2 hours (and not overnight in cold) without greatly increasing the risk of non-specific binding of the analytes used.

Stability and Storage

The preparation is stable for 12 months when stored at +2-8°C. Every lot is issued with a certificate indicating the expiry date. Contains ProClin® 300 as a preservative.

Certification

Each lot is certified for compliance to specifications. The product is produced under DIN EN ISO 9001 :2008 Quality Management system for the products in Immunoassay Development and Measurement, Products for Bioanalytics and Immunoassays.

How to Use

Use Antibody Diluent W as a buffer to dilute to a final concentration the primary antibody for your western blot. If you suspect that the secondary antibody you use also gives background or non-specific bands on a blot, use Antibody Diluent W for diluting your secondary antibody (conjugate) as well.

We recommend for performing Western Blot:

- Dilute primary antibody at least in volume 0.5 ml of antibody solution per each sq.cm (cm²) of the test membrane.
- As a general rule, use less concentrated antibody in larger volume rather than concentrated antibody in a small volume.
- The optimal temperature for western blot is +8°C to +14°C, longer incubations (overnight), lower concentration.
- Use incubation chambers as close in size to the size of the blot; perform the incubation of reciprocal shaker.