

## Product Information

### WESTERN BLOCKER SOLUTION

For HRP detection systems

Product Number **W0138**

Storage Temperature 2-8 °C

#### Product Description

Western Blocker Solution is used to block both PVDF and nitrocellulose membranes after proteins have been transferred onto them through dot blotting or Western blotting transfer. This blocking is done to reduce or eliminate nonspecific binding of primary or secondary antibodies.<sup>1</sup> The product is optimized for detection systems using horseradish peroxidase (HRP) conjugates. The Western Blocker Solution is also compatible with alkaline phosphatase based systems.

The Western Blocker Solution is superior to many other blocker solutions. It does not inhibit weak HRP signals, as seen with milk based blockers.<sup>2</sup> At the same time, it is specifically designed to block nonspecific background signal. Another advantage of this product is that the solution can be used as both a blocking component and as a probing component (primary and secondary antibody) in Western blotting analysis.

This product is ready to use. No dilution of the Western Blocker Solution is required before use in a blocking or probing step. Simply pour the Western Blocker Solution onto the membrane to begin its blocking action.

The Western Blocker Solution consists of proprietary blocking proteins and other components in Tris Buffered Saline (TBS), pH 7.75, containing 0.1% Triton X-100 (to assist blocking), and 600 ppm Kathon CG/ICP (an antimicrobial agent).

#### Procedure

The following are guidelines for the use of the Western Blocker Solution during the blocking and probing steps of a Western blot or dot blot:

- Use enough Western Blocker Solution in each blocking and probing step so that the membrane is covered and that it can move freely in the solution.

- Block for at least 30 minutes at room temperature on an orbital shaker or rocker.
- Western Blocker Solution should be used to dilute the primary and secondary antibodies to the proper concentrations for the detection substrate of choice.
- Probe the membrane with each antibody for at least 30 minutes at room temperature on an orbital shaker or rocker.

#### Precautions and Disclaimer

This product is for laboratory research use only, not for drug, household, or other use.

#### Storage/Stability

It is recommended to store the product at 2-8 °C. This product is stable for at least 2 years stored at 2-8 °C. Do not freeze product, precipitate may form if frozen and thawed.

#### References

1. Harlow, E., and Lane, D., *Antibodies: A Laboratory Manual*. (Cold Spring Harbor Laboratory Press, Plainview, NY, 1988).
2. Hoffman, W., et al., Binding of antibodies and other proteins to nitrocellulose in acidic, basic, and chaotropic buffers. *Anal. Biochem.*, **198(1)**, 112-8 (1991).

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JDS/MAM 11/01

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