

Datasheet for TMBM-1000**TMB Membrane Peroxidase Substrate - Ready-To-Use****Overview**

Description:	TMB Membrane Peroxidase Substrate - Ready-To-Use - TMBM-1000
Item No.:	TMBM-1000
Size:	1 L
Applications:	Dot Blot, IHC, WB

Product Details

Background:	This TMB (3,3',5,5'-Tetramethylbenzidine) is a substrate for peroxidase (HRP)-based immunoassays producing a blue-green chromogenic color on membrane or surface of sample material.
Synonyms:	3,3',5,5'-Tetramethylbenzidine, TMB-M, TMBM

Application Details

Tested Applications:	Dot Blot, IHC
Suggested Applications:	WB (Based on references)
Application Note:	TMB Membrane Peroxidase Substrate will produce an insoluble blue-green end product. Positive signal deposits blue-green color on membrane or surface of sample material. TMB Membrane Peroxidase Substrate incubation time will vary depending on the assay conditions. No dilutions are required, TMB Membrane Peroxidase Substrate comes ready to use.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1X
WB:	1X

Formulation

Physical State:	Liquid - clear
Concentration:	1X

Stabilizer: Proprietary

Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store container at 4° C prior to opening. Protect from moisture and light. No special shipping conditions or precautions are required.

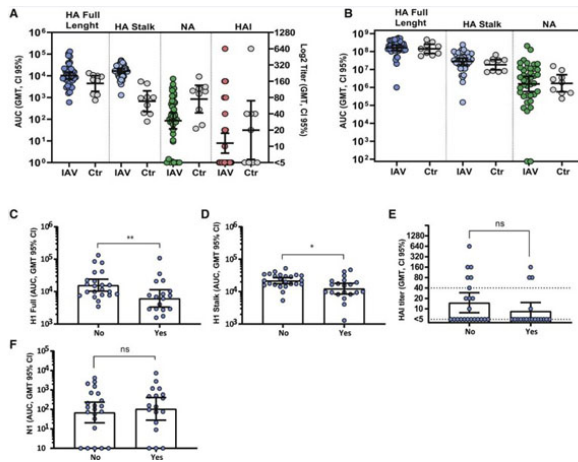
Expiration: Expiration date is one (1) year from date of receipt.

Images



Bottle

TMB Membrane Peroxidase Substrate - Ready-To-Use



ELISA

Immunological Features in the H1N1 Influenza-Infected SOTR Cohort

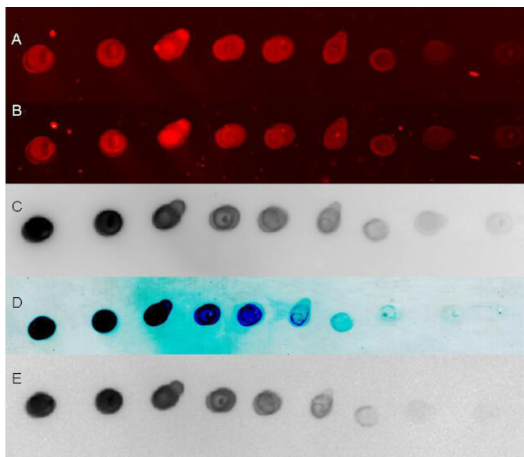
(A and B) Pre-existing antibody titers in SOTRs with H1N1pdm09 influenza virus infection (n = 40) compared with non-infected matched SOTRs controls (n = 9). The antibody level for each patient, GMT, and 95% CI are shown (A) for the indicated ELISA assay on the left y axis (full-length HA, stalk HA, and NA recombinant proteins as antigen) and HA-inhibiting (HAI) antibody titers on the right y axis. The HAI assay was performed using the whole H1N1pdm09 reference strain virus. (B) shows antibody-dependent cellular cytotoxicity (ADCC), measured by a reporter assay for full-length HA, stalk HA, and NA.

(C–F) Pre-existing antibody responses in SOTRs with LRSs at baseline. The antibody level for each patient and time point, GMT, and 95% CI are shown for (C) full-length HA ELISA, (D) stalk HA ELISA, (E) HAI, and (F) NA ELISA (ns, not significant; $p = 0.01$; $p = 0.006$; $p = 0.03$).

Experiments were performed in triplicates. 3,3',5,5'-Tetramethylbenzidine (p/n TMBM-100). Figure 1. PMID: 33294855.

Dot Blot

Rockland TMB membrane substrate, chemiluminescent substrate and secondary antibodies detect rabbit primary antibodies in a variety of platforms. Shown here is a serial 1:1 dilution of control rabbit IgG protein (011-0102, 250ng starting total load) co incubated with Rockland HRP conjugated Goat anti Rabbit IgG (611-103-122) and Dylight 649 conjugated goat anti Rabbit (611-143-122) 1:20K in MB-070. Blot was dried and imaged (A) on Biorad Versa Doc (30 sec, DyLight649), (B) LiCor Odyssey Reader (700 nm), (C) Rewetted incubated with Femtomax 110 reimaged using BioVersaDoc (for 60 sec), (D) Incubated with TMB substrate (TMBM-100) for 5 minutes and scanned, and (E) Rewetted for Chemiluminescence and imaged for 90 sec on the BioRad VersaDoc Imager,



References

- Aydillo T et al. Pre-existing hemagglutinin stalk antibodies correlate with protection of lower respiratory symptoms in flu-infected transplant patients. *Cell Rep Med.* (2020)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.