

SUBSTRATES

07/2017

TMB X-tn^d™, Ready-to-use

ELISA HRP Substrate
Cat. No. 5280

INTRODUCTION

Kem-En-Tec Diagnostic **TMB X-tn^d, Ready-to-use substrate** is a new, highly sensitive, and stable substrate with a unique aqueous formulation. This gives maximized safety during use and minimized waste problems after use. The substrate gives a high signal for a fast assay reaction. **TMB X-tn^d** is developed to support assays which require *low* detection limits while supporting OD readings of *highly positive* samples - and with NO precipitation of the TMB substrate up to 5.8 mAbs within 60 minutes.

TMB* produces a deep blue colour during the enzymatic degradation of H₂O₂ by horse radish peroxidase and gives a clear yellow colour after addition of stop solution. This ready-to-use substrate will, like our other TMB substrates, be efficiently stopped with a low acid concentration, i. e. requiring NO hazardous labelling.

* 3, 3', 5, 5'-tetramethylbenzidine

REAGENTS

Substrate buffer as well as **hydrogen peroxide** are included in this ready-to-use substrate. No other reagents should be added. Recommended stop solution is 0.35 M sulphuric acid. This concentration is critical to achieve optimal product performance.

THE WORKING PROCEDURE IS VERY SIMPLE

1. The desired amount of substrate is poured into a sealed container and allowed to reach room temperature in the dark.
2. Recommended volumes of 100 µl substrate solution per microtiter well is added.
Time of development is typically 5-30 minutes. We recommend the plate to be kept in the dark during incubation i.e. wrapped in tinfoil.
3. The blue colour is read directly in kinetic assays at 650 nm. For endpoint assays 100 µl (equal volumes) of 0.35 M sulphuric acid is added and the absorbance is read at 450/620 nm within one hour.
4. If reduced intensity is required it is recommended to shorten the time of development or to dilute the conjugate/antibody in the immunoassay further.

Dilution of the substrate is not recommended unless a special TMB X-tn^d Diluent is acquired.

RECOMMENDED HANDLING AND STORAGE

The TMB substrates are extremely sensitive to certain handling and storage conditions. Avoid exposure to light, heat and contamination with metal ions or peroxidase. Redisperse only into bottles made of High Density Polyethylene (HDPE), amber colour, i.e. Nalgene 2004, and keep the substrate at 2-8°C in the dark (Dispensing guidelines available upon request).

ECO-TEK® BRAND NAME

The **ECO-TEK** brand name stands for environmentally-friendly products. These products are characterized by offering the highest level of sustainability from replacing toxic components in buffer solutions to wasting less water.

Instruction Manual

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