

# Replacement of OPD tablets with TMB

## CHROMOGENIC SUBSTRATES

### Change from OPD tablets to Ready-to-use TMB

OPD (o-phenylenediamine) has historically been the most popular substrate for peroxidase with an orange reaction product that can be read at 490 nm.

TMB (3, 3', 5, 5'-tetramethylbenzidine) is a chromogenic substrate for Horseradish Peroxidase (HRP). TMB produces a deep blue color during the enzymatic degradation of hydrogen peroxide by HRP (measurable at 650 nm), and the addition of a stop solution gives a clear yellow color that absorbs at 450 nm.

### Benefits of changing to RTU TMB

To switch from OPD tablets to TMB is relatively easy. Kementec has developed TMB EASE (cat. no. 5320). The substrate is ready-to-use (RTU), ECO-TEK® and tuned to match 2 mg OPD tablets directly.

	OPD	TMB
<b>Sensitivity</b>	Less than TMB	> 2 times OPD*
<b>Toxicity</b>	Carcinogenic	No
<b>ECO-TEK</b>	No	Yes
<b>Ready-to-use (RTU)</b>	No	Yes
<b>Non-Hazardous stop solution</b>	No (1 M H <sub>2</sub> SO <sub>4</sub> )	Yes (0.2 M H <sub>2</sub> SO <sub>4</sub> )
<b>Customization</b>	No	Yes
<b>Stability</b>	1-2 years	Up to 4 years

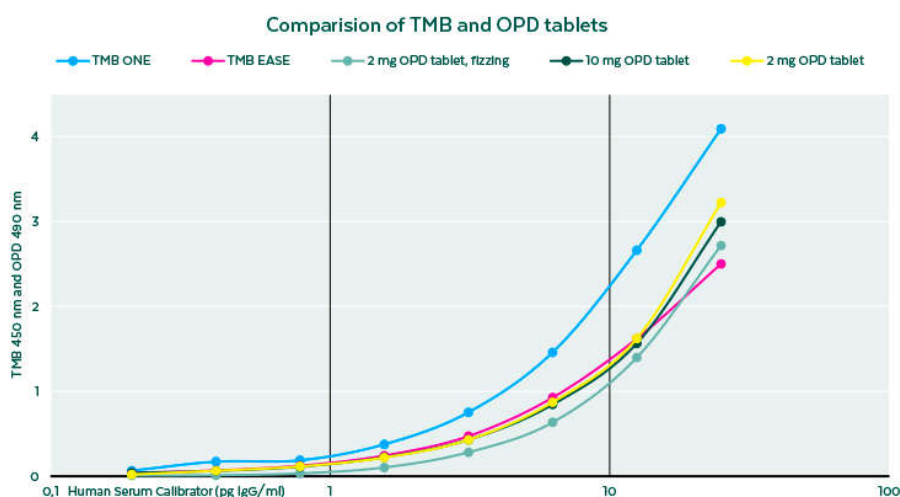
\*TMB EASE is designed to have the same sensitivity as 2 mg OPD tablets

If an increased assay signal is desired Kementec offer other RTU TMBs of higher sensitivities. For detailed information, please consult the Chromogenic Substrate brochure (fine-tuning of signal may be done adding Substrate Diluents to each of the high sensitive TMB product).

Additional benefits to consider, when using Kementec TMB products are:

- Reduced incubation time
- Dilute your conjugate further and hereby reduce assay costs

Please, feel free to contact us for TMB samples and technical support.



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