

## Datasheet: BUF054A

**BATCH NUMBER 160071**

<b>Description:</b>	TMB SIGNAL+
<b>Name:</b>	TMB SIGNAL+
<b>Format:</b>	Ready To Use
<b>Product Type:</b>	Accessory Reagent
<b>Quantity:</b>	100 ml

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
ELISA	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

#### Product Form

Ready to use TMB solution - liquid

#### Intended Use

BUF054A is a high performance TMB (3,3', 5, 5'- tetramethylbenzidine) solution, recommended for use in ELISA detection systems as a substrate for horseradish peroxidase (HRP).

BUF054A contains TMB, substrate buffer and hydrogen peroxide in a safe, ready to use solution. TMB SIGNAL+ has been optimised to enable increased sensitivity whilst maintaining increased stability. BUF054A provides minimal background and rapid development.

BUF054A produces a deep blue colour during the enzymatic degradation of H<sub>2</sub>O<sub>2</sub> by horseradish peroxidase. For kinetic assays the absorbance is read at 655nm (blue). However, for endpoint assays the reaction may be stopped with 0.2M sulphuric acid, resulting in a yellow colour read at 450nm.

#### Instructions For Use

1. Pour the desired amount of BUF054A into a sealable container and allow it to reach room temperature in the dark. Note that 0.1ml will be required per well.

2. Add 0.1ml of BUF054A per microtiter well.
3. Allow development of BUF054A. Development time is typically 5-30 minutes. For best results, the plate should be kept in the dark during incubation. i.e. wrapped in tinfoil.
4. For kinetic assays, read absorbance at 655nm (blue). For endpoint assays, add an equal volume of 0.2M sulphuric acid and read the absorbance at 450nm (yellow). This endpoint solution is stable for up to one hour.
5. If reduced intensity is required, it is recommended that the development time is reduced or the antibody/conjugate is diluted further. (Dilution of BUF054A is not recommended).

---

**Storage**

Store at +4°C. DO NOT FREEZE.

This product is photosensitive and should be protected from light.

Avoid exposure to heat and contamination with metal ions or peroxidase.

Store in bottles made of High Density Polyethylene (HDPE).

---

**Guarantee**

Guaranteed until date of expiry. Please see product label.

---

**Health And Safety Information**

Material Safety Datasheet documentation #10111 available at:  
<https://www.bio-rad-antibodies.com/SDS/BUF054A>  
10111

---

**Regulatory**

For research purposes only

---

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
'M350308:190307'

**Printed on 18 Jan 2024**