



K-BLUE[®] ADVANCED
TMB SUBSTRATE

Superior Activity | REACH Compliant | Long-term Stability

K-Blue[®] Advanced Performance

Introduction

NEOGEN[®] understands the importance of supplying substrates that provide superior performance while addressing evolving regulatory expectations. As a result, we have developed an innovative TMB substrate, K-Blue[®] Advanced. Our formula offers high activity and long-term stability. K-Blue Advanced is an ideal formula to meet any immunoassay manufacturer's needs.

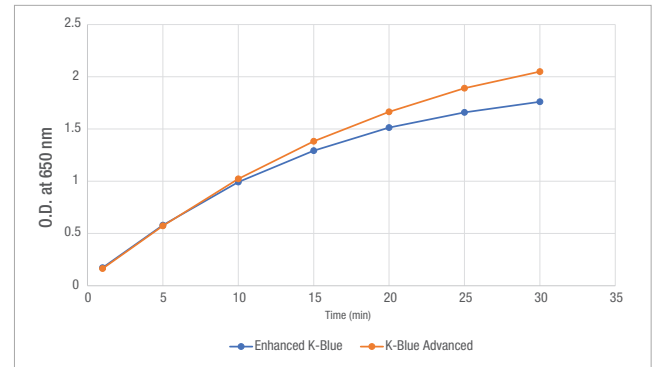
K-Blue Advanced Offers Superior Activity and Excellent Signal Strength

K-Blue Advanced is our most active substrate and is good option for assays that require high activity. K-Blue Advanced is approximately 10–20% more active than our popular Enhanced K-Blue substrate, depending on assay parameters.

K-Blue Advanced offers:

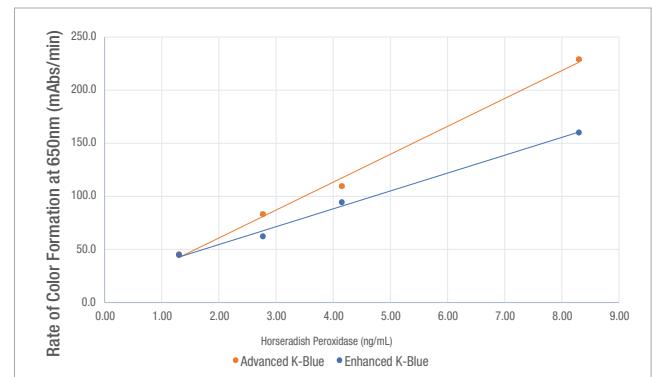
- Superior activity
- Low background and excellent signal-to-noise ratio
- Ideal for a range of substrate incubation times
- Minimum shelf life of 36 months at 2–8°C
- Rapid turnover rate
- Linear signal response across a range of HRP concentrations
- Increased sensitivity, especially at high HRP concentrations
- Compliant with Annex XVII for REACH

Activity Comparison



Ten microliters of horse radish peroxidase (HRP) (0.5 x concentration) + one hundred microliters of substrate per well

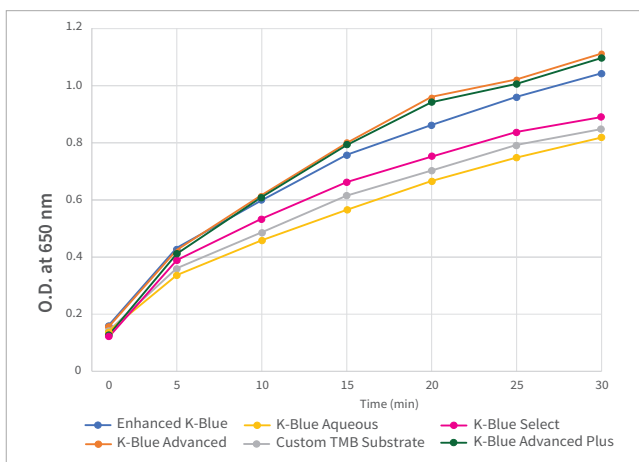
Linearity of Response



Twenty microliters of horse radish peroxidase (HRP) diluted in NEOGEN EIA diluent was added to standard flat bottom 96 well microtiter plate well and one hundred microliters of substrate was added. Rate of blue color signal formation (milli-absorbance/minute at 650 nm) was measured every two minutes for sixteen minutes at room temperature (20–25°C). Rate of blue color formation was plotted versus HRP concentration.

NEOGEN[®] TMB Substrates

Activity Comparison



Ten microliters of HRP (0.5x concentration) + one hundred microliters substrate per well

Ordering Information

319175 200 mL
 319176 500 mL
 319177 1 L
 319257 20 L (1 X 20 L)



We recognize that one TMB substrate will not meet the specifications of all HRP-based immunoassays. Therefore, NEOGEN[®] offers multiple unique one-bottle colorimetric formulas to meet specific requirements of different assay systems.

Additional NEOGEN TMB Formulas

Product	Activity	Shelf Life	Product Features	Available Sizes	Product No.
K-Blue[®] Advanced Plus	High activity	24 months when stored at 2-8°C	Excellent performance RTU (ready-to-use) Low background	200 mL	379175
				500 mL	379176
				1 L	379177
				20 L (1 x 20 L)	379257
Enhanced K-Blue	High activity	48 months when stored at 2-8°C	Longest shelf life of NEOGEN TMB substrates RTU (ready-to-use) Low background	200 mL	308175
				500 mL	308176
				1 L	308177
				20 L (1 x 20 L)	308257
K-Blue Select	Mid-level activity	24 months when stored at 2-8°C	Ideal for assays requiring a less active substrate RTU (ready-to-use) Low background	200 mL	382175
				500 mL	382176
				1 L	382177
				20 L (1 x 20 L)	382257
Custom TMB	Mid-level activity	36 months when stored at 2-8°C	Ideal for assays requiring a less active substrate RTU (ready-to-use) Low background	200 mL	309175
				500 mL	309176
				1 L	309177
				20 L (1 x 20 L)	309257
K-Blue Aqueous	Mid-level activity	36 months when stored at 2-8°C	100% solvent free Ideal when working under strict regulatory requirements RTU (ready-to-use) Low background	200 mL	331175
				500 mL	331176
				1 L	331177
				20 L (1 x 20 L)	331257
Alert[®] K-Blue Aqueous	Kinetics similar to K-Blue Aqueous	36 months when stored at 2-8°C	Clearly indicates when substrate and acid stop have been added to the wells (turns pink) Ideal for sandwich-based HRP assays 100% solvent free RTU (ready-to-use) Low background	200 mL	334175
				500 mL	334176
				1 L	334177
				20 L (1 x 20 L)	334257

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