

# Reagents

## Red Stop Solution

Red Stop solution is a non-acidic, ready-to-use stopping reagent that contains no hazardous acids. It produces and retains a dark purple to pink color for a minimum of two hours when added to TMB substrates. This makes the reaction easier to read at 650 nm or visually as compared to acid stops. With a two year stability at 4°C or room temperature, Red Stop is preferred over commonly-used acidic stop solutions.

## HRP Diluent

A phosphate buffer (PBS) with protein designed to dilute peroxidase.

## EIA Buffer

A ready-to-use buffer with a one year stability at 4°C designed to dilute enzyme conjugates, standards and samples.

## Wash Buffer

A concentrated (10x) buffer that, once diluted with de-ionized water, can be used to wash all unbound enzyme conjugate, samples and standards from microplates. Neogen's wash buffer offers one year stability at 4°C.

# Custom Packaging Service

Neogen can package your substrates and reagents in custom bottle sizes and volume fills to meet your specific packaging requirements. This service is a timesaving feature for any test kit manufacturer. For details on this service, please contact a Neogen representative.



## 20 Liter Container

Our new 20 L container offers longer storage capability for K-Blue® (TMB) and K-Gold® substrates.



## 55 Liter Carboy

This new container is now offered for your high-volume fills and is the ideal space-saving solution. A minimum order of 4 carboys is required.\*

\*Please speak to your representative about other quantities.

# Ordering Information

800/477-8201 (USA/Canada) or 859/254-1221  
inform@neogen.com • www.neogen.com

## Enhanced K-Blue® Substrate

(Single Bottle TMB, Microwell)	
200 mL.....	308175
500 mL.....	308176
1 Liter.....	308177
10 Liters (10 x 1 Liter).....	308179
20 Liters (20 x 1 Liter).....	308178

## K-Blue® Aqueous Substrate

(Single Bottle TMB, Microwell)	
200 mL.....	331175
500 mL.....	331176
1 Liter.....	331177
10 Liters (10 x 1 Liter).....	331179
20 Liters (20 x 1 Liter).....	331178

## K-Blue® MAX Substrate

(Single Bottle TMB, Microwell)	
200 mL.....	304175
500 mL.....	304176
1 Liter.....	304177
10 Liters (10 x 1 Liter).....	304179
20 Liters (20 x 1 Liter).....	304178

## K-Blue® Low Activity Substrate

(Single Bottle TMB, Microwell)	
200 mL.....	330175
500 mL.....	330176
1 Liter.....	330177
10 Liters (10 x 1 Liter).....	330179
20 Liters (20 x 1 Liter).....	330178

## Alert® K-Blue Aqueous

200 mL.....	334175
500 mL.....	334176
1 Liter.....	334177
10 Liters (10 x 1 Liter).....	334179
20 Liters (20 x 1 Liter).....	334178

## Alert® K-Blue MAX

200 mL.....	333175
500 mL.....	333176
1 Liter.....	333177
10 Liters (10 x 1 Liter).....	333179
20 Liters (20 x 1 Liter).....	333178

## Custom TMB Substrate

(Single Bottle TMB, Microwell)	
200 mL.....	309175
500 mL.....	309176
1 Liter.....	309177
10 Liters (10 x 1 Liter).....	309179
20 Liters (20 x 1 Liter).....	309178

## K-Gold® Substrate

(Single Bottle PNPP, Microwell)	
200 mL.....	303175
500 mL.....	303176
1 Liter.....	303177
10 Liters (10 x 1 Liter).....	303179
20 Liters (20 x 1 Liter).....	303178

## Chemiluminescent Substrate A

(Microwell)	
30 mL Kit ( 3 x 10 mL).....	313182
60 mL Kit (3 x 20 mL).....	313170
120 mL Kit (3 x 40 mL).....	313221
3 Liter Kit (3 x 1 Liter).....	313177

## Chemiluminescent Substrate B

(Microwell)	
50 mL Kit (2 x 25 mL).....	318189
110 mL Kit (2 x 55 mL).....	318235
500 mL Kit (2 x 250 mL).....	318188
2 Liter Kit (2 x 1 Liter).....	318177

## Chemiluminescent Substrate C

(Microwell)	
50 mL Kit (2 x 25 mL).....	320189
110 mL Kit (2 x 55 mL).....	320235
500 mL Kit (2 x 250 mL).....	320188
2 Liter Kit (2 x 1 Liter).....	320177

## Chemiluminescent Substrate D

(Microwell)	
50 mL Kit (2 x 25 mL).....	322189
110 mL Kit (2 x 55 mL).....	322235
500 mL Kit (2 x 250 mL).....	322188
2 Liter Kit (2 x 1 Liter).....	322177

## ABTS Substrate

(Single Bottle, Microwell)	
25 mL.....	310189
100 mL.....	310247
1 Liter.....	310177
5 Liters (1 x 5 Liter).....	310260

## BCIP/NBT (Blue) Membrane Substrate

(Single Bottle)	
25 mL.....	314189
100 mL.....	314247
1 Liter.....	314177
5 Liters (1 x 5 Liter).....	314260

## BCIP/NBT (Purple) Membrane Substrate

(Single Bottle)	
25 mL.....	315189
100 mL.....	315247
1 Liter.....	315177
5 Liters (1 x 5 Liter).....	315260

## TMB Membrane Substrate

(Single Bottle)	
25 mL.....	311189
100 mL.....	311247
1 Liter.....	311177
5 Liters (1 x 5 Liter).....	311260

## Red Stop Solution

(Non-Acidic, Ready-to-Use Stopping Reagent)	
200 mL.....	301474
500 mL.....	301475
1 Liter.....	301476

## EIA Buffer

500 mL.....	301276
1 Liter.....	301277

## Wash Buffer

500 mL.....	301176
1 Liter.....	301177

## HRP Diluent Buffer

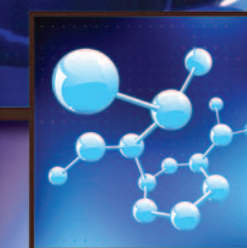
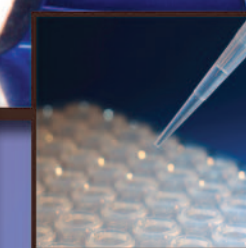
10 mL.....	301370
50 mL.....	301371

**For research and manufacturing use only.**



To order, call 800/477-8201 (USA/Canada)  
or 859/254-1221 • Fax: 859/255-5532  
www.neogen.com

# Substrates and Reagents



Microwell HRP  
Microwell AP  
Membrane HRP  
Membrane AP  
Chemiluminescent HRP



## Microwell Substrates: HRP Applications

### Neogen's TMB Substrates

Neogen recognizes that one TMB microwell substrate formulation will not meet the specifications of all HRP-based immunoassays. Therefore, Neogen offers eight unique one-bottle TMB microwell substrate formulations to meet specific requirements of different assay systems. Our broad line of substrates offers the advantages of purchasing multiple formulations from one manufacturer, allowing for larger quantity discounts, uniform delivery schedules and simplified purchasing procedures. If you do not see the activity level you require, please let us know. We can customize a formula for you.

All of Neogen's TMB microwell substrate formulations are one-bottle stabilized chromogenic substrates for use with horseradish peroxidase immunoassays. The formulations contain 3,3',5,5'-Tetramethylbenzidine (TMB) and hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) in a ready-to-use format with long-term stability. Our TMB substrates will turn a deep blue color in the presence of peroxidase-labeled conjugate. These substrates are not applicable for use with assays requiring a precipitating substrate. Neogen substrates have common characteristics of low background, excellent lot-to-lot consistency, and contain no DMF or DMSO.

### Corporate Profile

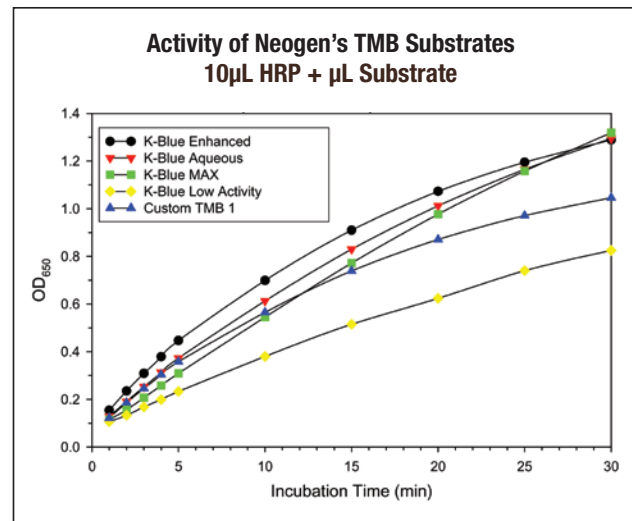
Neogen Corporation develops, manufactures and markets a diverse line of products to provide solutions for life science research and diagnostics, and food and animal safety. Founded in 1982, Neogen (Nasdaq: NEOG) has grown to more than 600 employees in multiple U.S. and international locations. With corporate headquarters in Lansing, Mich., Neogen has additional facilities in Lexington, Ky., Randolph, Wisc., Lincoln, Neb., Scotland, China, Mexico, and Brazil. Our international presence provides us with better access to those markets, and allows the company to offer improved service to customers throughout these markets with easily accessible inventory and increased support.

Neogen's reagents are used world wide by diagnostic test kit manufacturers and independent researchers. Our life science products also include ELISA test kits used for multiple research applications and drug detection kits for the forensic and animal sport testing markets. We are firmly committed to the quality standards customers expect and to consistently meeting those standards, which is why Neogen's life sciences facilities are fully ISO 9001 certified.

### Alert® TMB Substrates: K-Blue® Aqueous and K-Blue® MAX

Neogen now offers two revolutionary TMB substrates that utilize a patent-pending indicator system that clearly indicates when both substrate and acid stop have been added to the assay wells. Alert K-Blue Aqueous and Alert K-Blue MAX offer the following advantages:

- Indicator system (patent-pending)
- Ideal for sandwich-based HRP assays
- Improved quality assurance for automated assays
- Ready-to-use formulas
- High sensitivity



### Enhanced K-Blue®

- Stability: minimum of 18 months at 4°C
- Ideal for assays requiring high activity. This formula offers the highest activity, as compared to Neogen's K-Blue MAX for assays with shorter incubation times

### K-Blue® Aqueous (100% solvent free)

- Revolutionary, all aqueous TMB substrate
- Ideal for kit manufacturers working under strict regulatory requirements
- Stability: 24 months at 4°C
- High activity: kinetic reaction is similar to Neogen's Enhanced K-Blue formulation

### K-Blue® MAX

- Extended stability: 36 months at 4°C
- Ideal for assays requiring high activity. This formula offers the highest activity with 30 minute incubations

### K-Blue® Low Activity

- Stability: 24 months at 4°C
- Ideal for assays requiring a less active substrate

### Custom TMB Substrate

- Stability: 18 months at 4°C
- Activity: ideal for assays requiring a less active substrate

### ABTS Substrate

ABTS Substrate will produce a soluble blue-green reaction in the presence of peroxidase. This formulation offers the following advantages:

- Stability: minimum of 18 months at 4°C
- Contains no DMF or DMSO
- Excellent lot-to-lot consistency
- Easy-to-use one-bottle solution

## Microwell Substrates: AP Applications

### K-Gold® Substrate

K-Gold is a one-bottle stabilized chromogenic substrate for use with alkaline phosphatase-based immunoassays. This formulation offers the following advantages:

- Extended stability: minimum of 30 months at 4°C
- High activity
- Low background
- Excellent lot-to-lot consistency
- Ideal for automation
- Easy-to-use one-bottle solution



## Membrane Substrates

### BCIP/NBT (Blue) Membrane Substrate AP Applications

This easy-to-use one-component substrate is for use in phosphatase membrane assays. In the presence of phosphatase, an insoluble, permanent dark blue reaction is obtained. This formulation offers the following advantages:

- Stability: minimum of 36 months at 2–25°C
- Low background
- No aprotic solvents

### BCIP/NBT (Purple) Membrane Substrate AP Applications

This easy-to-use one-component substrate is for use in phosphatase membrane assays. In the presence of phosphatase, an insoluble, permanent dark purple reaction is obtained. This formulation offers the following advantages:

- Stability: minimum of 36 months at 2–25°C
- Low background
- No aprotic solvents

### TMB Membrane Substrate HRP Applications

This substrate is for use in peroxidase-based membrane assays. In the presence of peroxidase, this substrate will produce an insoluble, permanent dark blue reaction. This easy to use one-bottle solution offers the following advantages:

- Stability: minimum of 24 months at 2–25°C
- Contains no hazardous solvents
- Contains no DMF or DMSO
- Excellent lot-to-lot consistency

## Chemiluminescent Substrates: HRP Applications

Neogen offers four chemiluminescent substrate formulations for microwell or membrane peroxidase applications that will meet a wide range of detection requirements.

- Ideal for ultimate detection based on Luminol chemistry
- Formulations offering four levels of sensitivity from picogram to femtogram
- Stability: minimum of 18 months at 4°C
- Easy-to-use two-component formulations

### Chemiluminescent HRP Substrate A

- Highest sensitivity
- Microwell applications
- 1:2 ratio of reagents A and B

### Chemiluminescent HRP Substrate B

- Higher sensitivity
- Microwell and/or membrane applications
- 1:1 ratio of reagents A and B

### Chemiluminescent HRP Substrate C

- High sensitivity
- Microwell and/or membrane applications
- 1:1 ratio of reagents A and B

### Chemiluminescent HRP Substrate D

- Moderate sensitivity
- Microwell and/or membrane applications
- 1:1 ratio of reagents A and B