

# Hydrogen Peroxide Detection

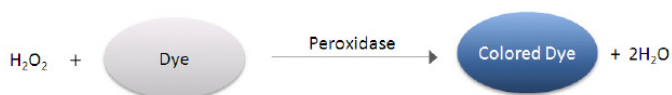
## Colorimetric Redox Dye for Clinical Chemistry



### High-sensitive Redox Dyes

**B**enzidine derivatives (e.g. TMBZ or SAT-3) are well known to be oxidized with peroxidase and one molecule of hydrogen peroxide. Since the amount of the yielded dye is directly proportional to the concentration of hydrogen peroxide, benzidine derivatives are applied for diagnostic analyses or enzyme immuno-assays as good indicators of hydrogen peroxide.

#### Principle



### KN-dye

- Higher photo resistance in solution
- Highly sensitive detection of  $\text{H}_2\text{O}_2$

KN-dyes are designed and exclusively developed by Dojindo as hydrogen peroxide detection reagents. DA-67 is known as a sensitive hydrogen peroxide indicator; however, it has a low stability in light. KN-dyes have higher stability in light and excellent solubility in water. In addition to this, KN-dyes are less likely to bind with other substances present in a sample.

[Molar adsorption coefficient : approximately  $1 \times 10^5 \text{ L}/(\text{mol}\cdot\text{cm})$ ]

#### Products List

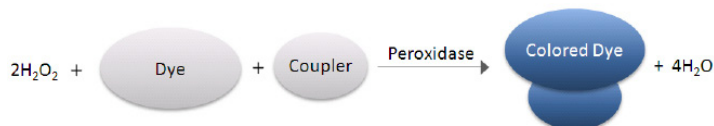
Product	$\lambda_{\text{max}}$	Code#	Unit	Price (USD)
KN-301	666	K254	100 mg	Inquire
KN-302	666	K255	100 mg	Inquire
KN-303	666	K256	100 mg	Inquire
KN-304	666	K257	100 mg	Inquire
TMBZ	655	T022-10	1 g	74.00
		T022-12	5 g	263.00
TMBZ-HCl	655	T039-10	1 g	156.00
DAB	465	D006-10	1 g	191.00
		D006-12	5 g	702.00
SAT-3	675	S302-10	1 g	219.00

Contact us for specific size requirements.

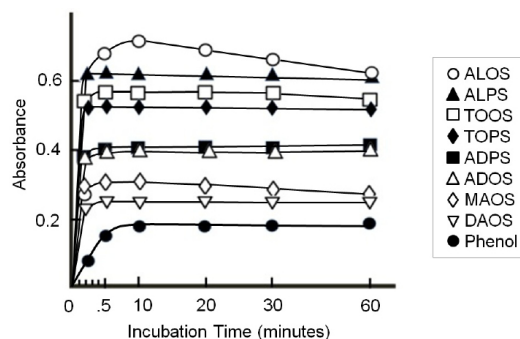
### Coupler-based Redox Dyes

**N**ew Trinder's reagents are highly water soluble aniline derivatives. In the presence of a coupler such as 4-aminoantipyrine, the reagents are oxidized with peroxidase and two molecules of hydrogen peroxide.

#### Principle



#### Data of Color Development



Time Dependence of Color Development

The concentration of reaction; 4-aminoantipyrine;  $3.3 \times 10^{-4} \text{ M}$ ,  $\text{H}_2\text{O}_2$ ;  $1.5 \times 10^{-5} \text{ M}$ , Peroxidase; 3.3 units, hydrogen donor;  $3.3 \times 10^{-4} \text{ M}$ , pH; 7.0.

#### Products List

Product	$\lambda_{\text{max}}$	pH	$\epsilon$	Code#	Unit	Price (USD)
ADOS	542	5.5-9.5	$2.72 \times 10^4$	OC01-10	1 g	111.00
ADPS	540	5.9-9.5	$2.79 \times 10^4$	OC02-10	1 g	111.00
ALPS	561	6.5-7.5	$4.13 \times 10^4$	OC04-10	1 g	111.00
DAOS	593	5.5-9.5	$1.75 \times 10^4$	OC06-10	1 g	111.00
HDAOS	583	5.5-9.5	$1.73 \times 10^4$	OC08-10	1 g	111.00
MADB	630	5.5-9.5	$1.65 \times 10^4$	OC21-10	1 g	111.00
MAOS	630	5.5-9.5	$2.25 \times 10^4$	OC11-10	1 g	108.00
TODB	550	5.5-9.5	$3.80 \times 10^4$	OC22-10	1 g	108.00
TOOS	555	5.5-9.5	$3.92 \times 10^4$	OC13-10	1 g	108.00
TOPS	550	5.5-9.5	$3.74 \times 10^4$	OC14-10	1 g	111.00

Contact us for specific size requirements.

### For inquiries and orders

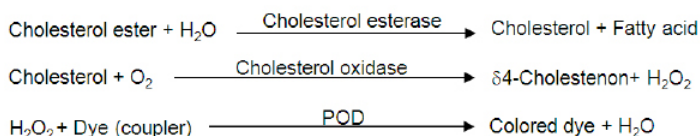
Phone : 1.877.987.2667  
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Fax : 1.301.987.2687

Online : [www.dojindo.com](http://www.dojindo.com)  
E-mail : [info@dojindo.com](mailto:info@dojindo.com)

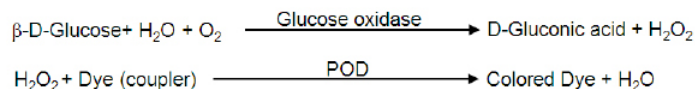


## Application for Diagnostic Research

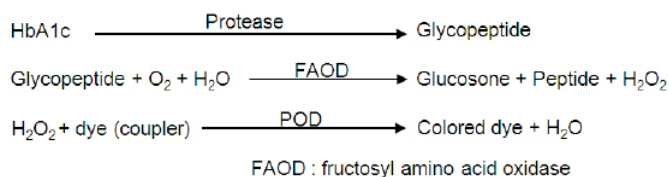
### Cholesterol



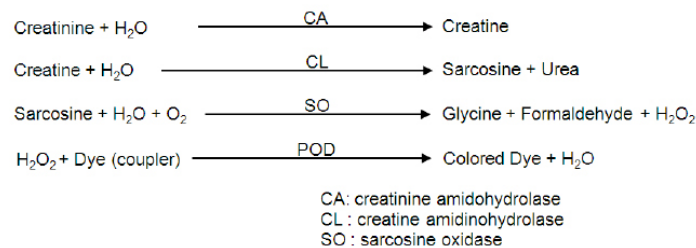
### Glucose



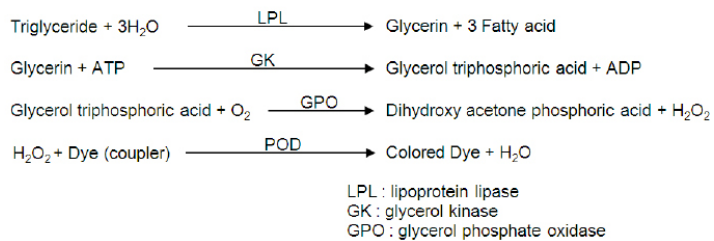
### HbA1c



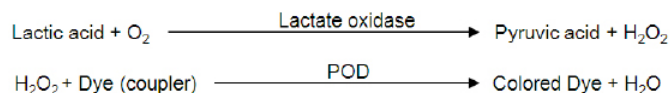
### Creatine



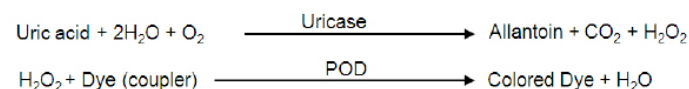
### Triglyceride



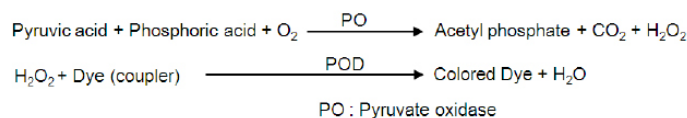
### Lactic acid



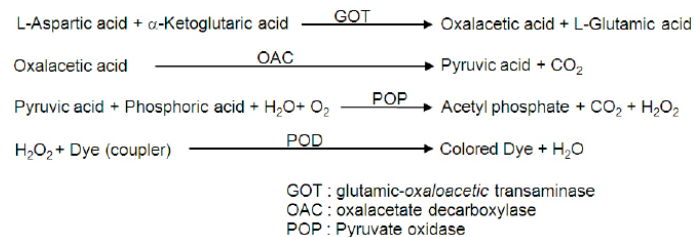
### Uric acid



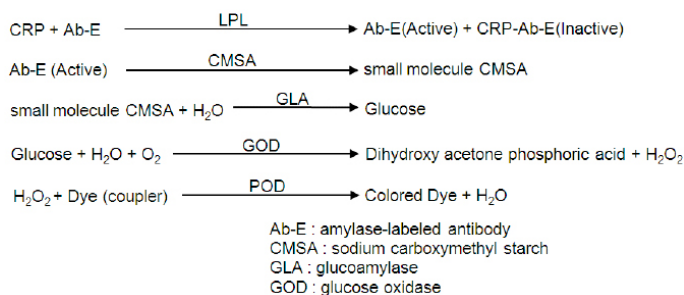
### Pyruvic acid



### L-Aspartic acid



### CRP ( C-Reactive Protein)



### Research Use Only

Prices listed are for U.S. customers only and may vary in other countries.  
Prices are subject to change without notice.

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