

# Dehydrogenase Detection

## Diagnostic Research with Tetrazolium Salts



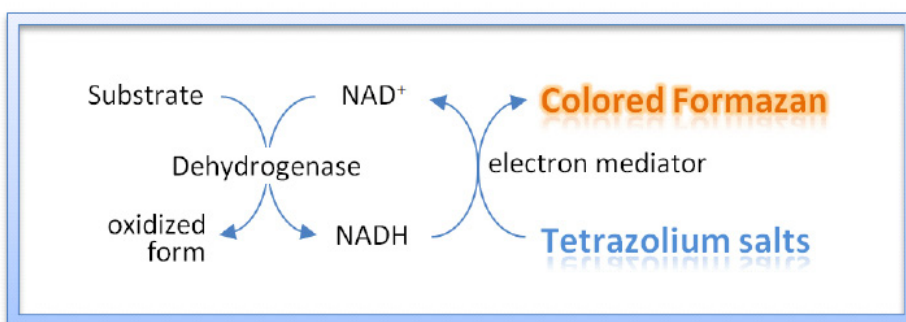
- High water-soluble dyes allow wide range usage such as blood testing
- Highly sensitive colorimetric dyes

### Principle

**Applicable measurement for**

- Glucose
- Triglycerides
- Creatine Kinase
- Bile acid
- Urea
- Ammonium etc...

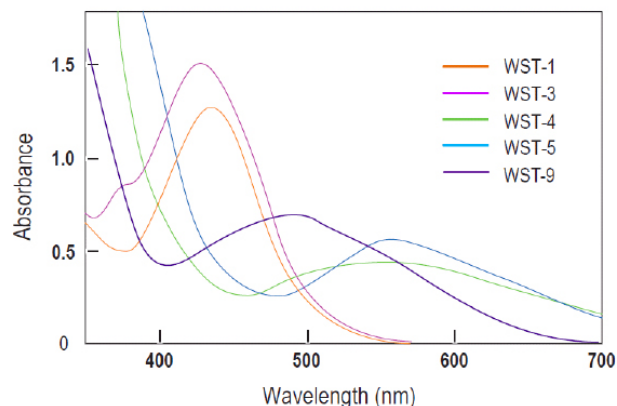
Tetrazolium salts are known to produce formazan dyes upon reduction of NADH in the presence of an electron mediator and have therefore been used in clinical analyses of NADH or NADH-dependent enzyme activities.



### Water Soluble Type

Water-soluble tetrazolium salts (WSTs) were first developed and introduced by Dojindo. Since the water solubilities of Dojindo's WSTs are high, high concentration of the stock solution (e.g. 1 mM to 100 mM) can be prepared.

Tetrazolium	$\epsilon$	$\lambda_{max}$	Code#	Unit / Price
WST-1	$3.7 \times 10^4$	438 nm	W201-10	100 mg / \$155.00
			W201-12	500 mg / \$536.00
WST-3	$3.1 \times 10^4$	433 nm	W202-10	100 mg / \$176.00
WST-4	$1.0 \times 10^4$	530 nm	W203-10	100 mg / \$176.00
WST-5	$2.7 \times 10^4$	550 nm	W204-10	100 mg / \$180.00
WST-9	$1.6 \times 10^4$	490 nm	W217-10	100 mg / \$300.00



Absorption Spectra of WST Formazan Dyes

### Water Insoluble Type

Tetrazolium	$\epsilon$	$\lambda_{max}$	Code#	Unit / Price
INT	$1.5 \times 10^4$	490 nm	I003-10	1 g / \$53.00
Nitro-TB (NTB)	$3.6 \times 10^4$	530 nm	N011-10	100 mg / \$34.00
			N011-12	1 g / \$194.00
TB	$2.6 \times 10^4$	525 nm	T012-10	1 g / \$57.00

### Electron Mediator

Electron Mediator	Code#	Unit / Price
1-Methoxy PMS	M003-10	100 mg / \$85.00

For specific size requirements, please feel free to contact us.

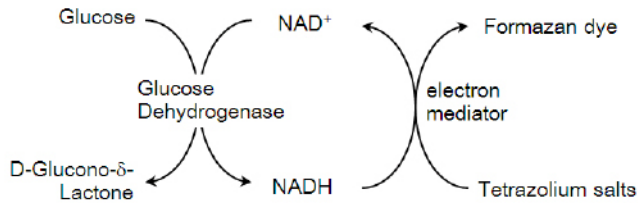
#### For inquiries and orders



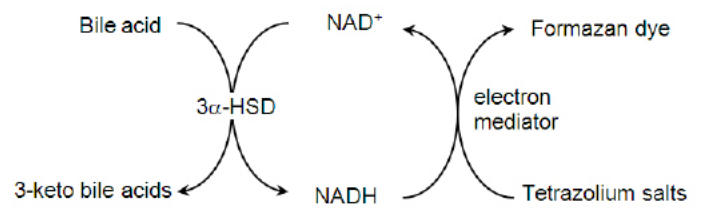
Online : [www.dojindo.com](http://www.dojindo.com)  
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## Detection Scheme in Diagnostic Measurement

### Glucose Detection

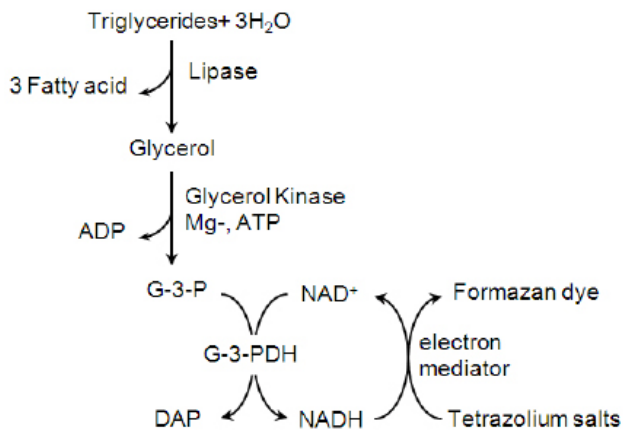


### Bile Detection



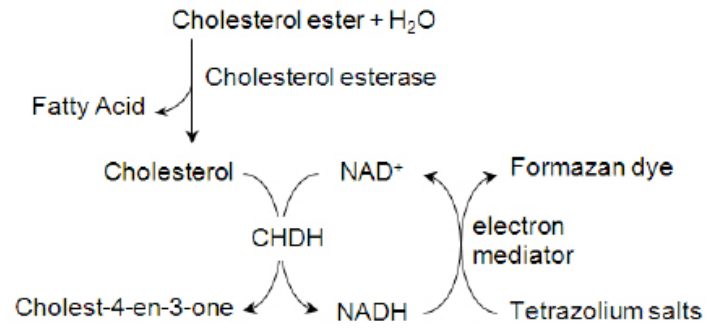
3α-HSD : 3α-hydroxysteroid dehydrogenases

### Triglycerides Detection



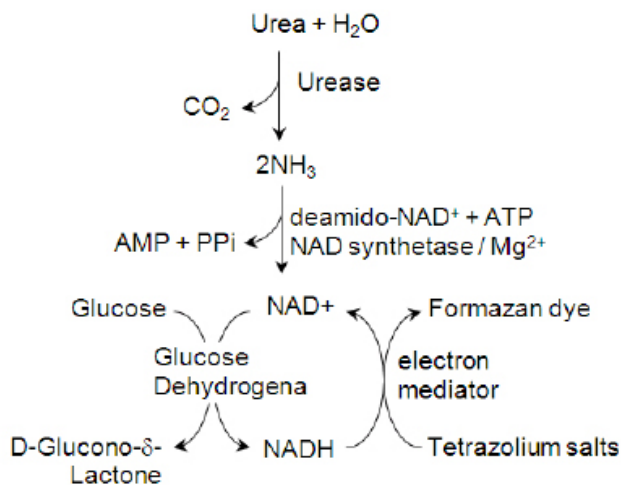
G-3-P: glycerol-3-phosphate  
G-3-PDH: glycerol-3-phosphate dehydrogenase  
DAP: dihydroxyacetone phosphate

### Total Cholesterol (T-CHO) Detection

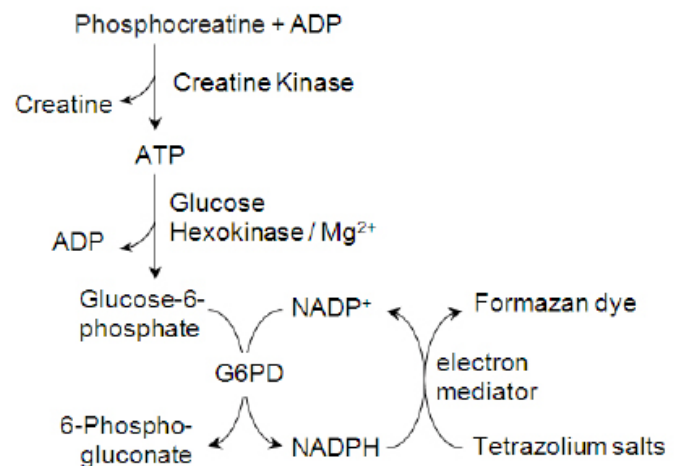


CHDH: cholesterol dehydrogenase

### Urea or NH<sub>3</sub> Detection



### Creatine Kinase Detection



#### 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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