

# SALICYLATE

## Salicylate Enzyme Assay Kit

- *'Ready to Use' liquid reagents*
- *Single Point Calibration - wide dynamic range*
- *Specific enzyme reaction - unlike the traditional 'Trinder Reaction'*
- *Rapid - assay may be performed manually in 10 minutes*
- *Adaptable - kit can be run on discrete analysers*
- *Reliable - consistent performances on External Quality Assessment*
- *Robust - easy to use methodology*

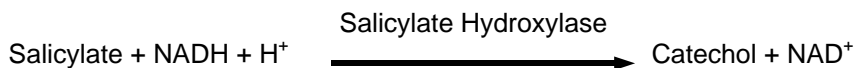
### • Indication

The salicylate assay is an enzymatic assay for the detection and quantitation of salicylate in human sera or plasma.

### • Summary and explanation of test

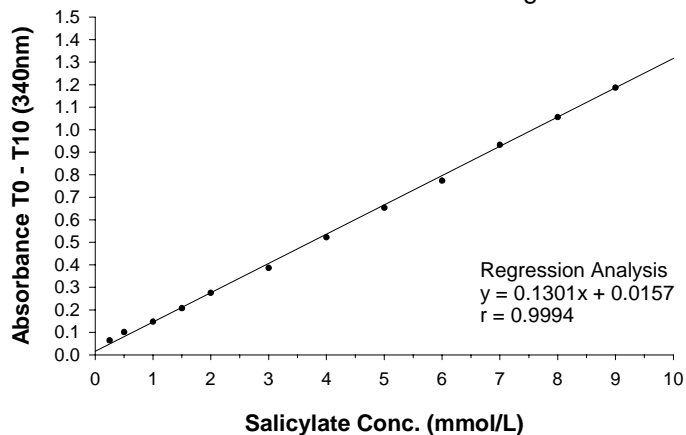
Salicylate (aspirin) is a common non-steroidal drug used for its analgesic and anti-inflammatory properties. Ingestion of large amounts of salicylate leads to disturbances of the central nervous system and to gastrointestinal problems, encephalopathy and renal failure. Salicylate intoxication represents an acute medical emergency and rapid diagnosis and quantitative determination of the drug is necessary to assess effective patient management.

The assay utilises salicylate hydroxylase which catalyses the conversion of salicylate and NADH to catechol and NAD in the presence of oxygen. The resulting decrease in absorbance at 340nm, due to the conversion of NADH to NAD, is directly proportional to the concentration of salicylate in the sample.



### • Linearity

Dynamic range : 0.06 - 10.00 mmol/L  
: 8.3 - 1380.0 mg/L



- *Related Product: Paracetamol*
- *Safety Datasheet & Protocols available on-line at:*  
<http://www.clsdiagnostics.com/downloads/>

# Salicylate Enzyme Assay Kit

Catalogue No. K9001



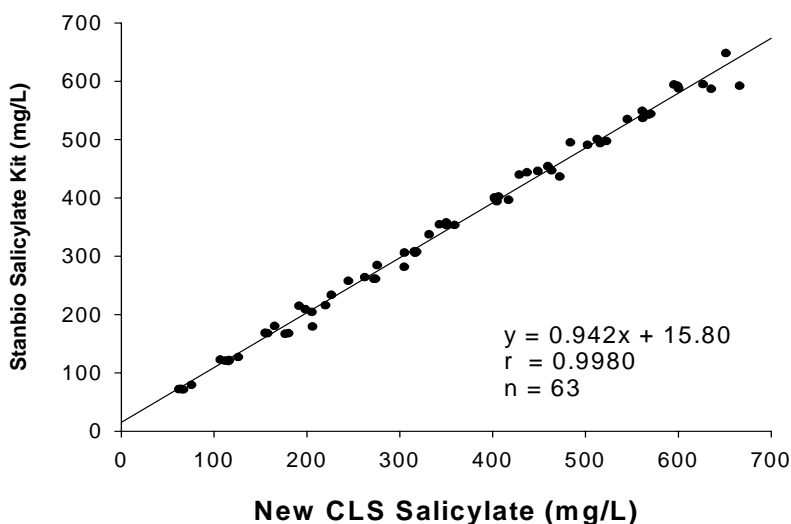
## Precision

Intra-assay precision (n = 20)			Inter-assay precision (n = 20)		
Mean (mmol/L)	Mean (mg/L)	CV (%)	Mean (mmol/L)	Mean (mg/L)	CV (%)
1.19	163.9	7.7	1.06	146.6	5.8
3.60	497.0	5.6	3.23	445.8	7.2
2.24*	309.4*	1.1			

\* run on automated analyser, other data from manual assay

## Correlation

StanBio data from WEQAS user group compared to CLS measured.



## Recovery

Recovery of salicylate added to human sera showed the following results:

Salicylate		% Recovery
(mmol/L)	(mg/L)	
0.45	62.1	108.0
0.90	124.2	103.3
2.20	303.6	99.5
4.40	607.2	97.1

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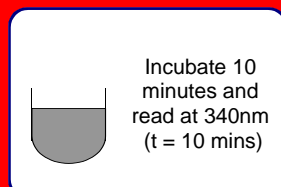
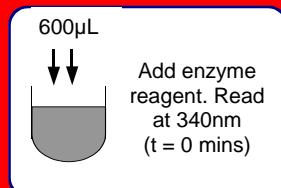
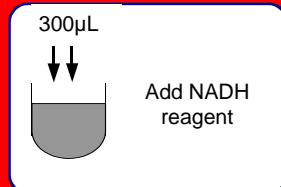
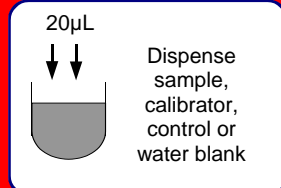
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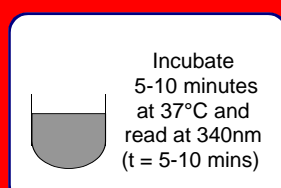
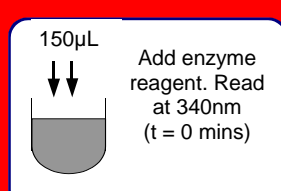
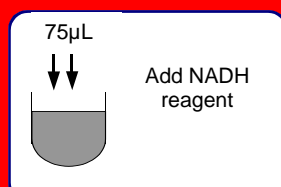
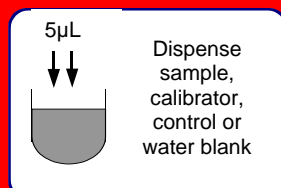
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## Test procedure Manual Method



## Automated Method



SALV2 130505