




# The NGAL Test™

For your clinical chemistry analyzer

## PERFORMANCE DATA AND APPLICATION NOTE FOR ROCHE COBAS® C501/C502<sup>1</sup>


### The NGAL Test™ Reagent Kit

REF/Cat. No.	ST001CA	ST002CA	ST003CA
Product name	The NGAL Test™ Reagent Kit		The NGAL Test™ Calibrator Kit
			150, 600, 1500, 3000, 5000 ng/mL
	1 x 35 mL	1 x 7 mL	5 x 1 mL
			Low and High
			3 x 1 mL x 2 levels



Number of determinations: 1 mL of immunoparticle suspension  provides 20 cuvette readings with the provided settings in this application. The dead volume of the analyzer and reagent container should be added when calculating the required amount of reagent.

To use BioPorto's The NGAL Test™ on the cobas® c 501/c502 chemistry analyzer the reagents must first be transferred into new containers. The appropriate containers are called cobas® c pack MULTI and can be ordered via your local Roche representative. Please make sure to acquire the following two items:

Item	Cat. No.	Product name	
Empty reagent carrier	04593138 190	cobas® c pack MULTI	Order from Roche
Open/close tool			Request from Roche

 Read the instructions for The NGAL Test™ (ST001) and cobas® c pack MULTI before transferring the reagents.

#### FILLING THE COBAS C PACK MULTI:

1. Turn the **cobas c** pack MULTI towards you as shown at the right.
2. Unscrew the screw cap of the bottle in **position A** in the center of the **cobas c** pack MULTI using the open/ close tool.
3. Pipette 18 mL of The NGAL Test™ Reaction Buffer  into the open bottle of the cobac c pack MULTI (position A)\*.
4. Close the bottle tightly using the open/close tool.
5. Unscrew the screw cap of the bottle in **position C** on the right side of the **cobas c** pack MULTI using the open/close tool.
6. Pipette the full volume (7 mL) of The NGAL Test™ Reagent  into the open bottle of **cobas c** pack (position C).
7. Close the bottle tightly using the open/close tool.
8. Leave the bottle in position B on the left side of the **cobas c** pack MULTI empty.



\* The remaining 17 mL of Reaction Buffer  are surplus and can be discarded.

#### NOTE

Before loading the **cobas c** pack MULTI onto the instrument, it has to be reserved for a development channel application. Once a cobas c pack MULTI is removed from the instrument, it cannot be reloaded. When loaded onto the instrument, each **cobas c** pack MULTI is registered as full in the reagent inventory. Therefore, if a used and/or only partially filled cobas c pack MULTI is loaded onto the instrument, the number of tests may be reduced or it may be refused by the instrument.

#### PRECAUTIONS

Do not pipette by mouth.  
Do not shake the reagents.  
Use only clean containers if transferring reagents.  
Do not pour reagents back into their original containers once transferred.  
Do not use reagents after the expiry date on the labels.

Do not switch caps on reagent containers as it may cause contamination or mix-up.  
Reagents with different lot numbers should not be mixed.  
All solutions supplied should be handled carefully and disposed of in accordance with national and local regulations.

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## PERFORMANCE DATA

The performance data shown were obtained by the manufacturer for this particular analyzer model. For additional performance data and product application, please read the instructions for use accompanying the products carefully. Each individual laboratory should validate the use of The NGAL Test™ on its system.



### LIMIT OF DETECTION (LoD)

Not tested on this analyzer model. Refer to Instructions for Use for more information.

### RANGE

The measuring range of The NGAL Test™ is 25-5000 ng/mL

### SECURITY RANGE

The NGAL Test™ showed no effect of antigen excess for NGAL concentrations below 40,000 ng/mL (the highest concentration tested).

### PRECISION

REF	Mean (ng/mL)	SD	CV %	n	Acceptance
ST003CA Low	204.5	4.3	2.1	10	<5 %
ST003CA High	500.4	5.5	1.1	10	<3 %

### LIMIT OF QUANTIFICATION (LoQ)

The LoQ is 25 ng/mL, which was verified on this analyzer model:

25 ng/mL	Mean (ng/mL)	SD	CV %	n	Accept
	24.8	3.35	13.55	20	< 20%

### INTERFERENCE

No interference was detected with hemoglobin up to 5 g/L, conjugated bilirubin up to 300 mg/L, free bilirubin up to 300 mg/L, and up to 5% v/v of a 10% v/v lipid emulsion (corresponding to 5 g/L).

### METHOD COMPARISON

NGAL measurements have been compared to measurements on a Hitachi 917. Data is available on request

### CALIBRATION STABILITY

It is recommended to recalibrate every 4 weeks, when reagent lots change or quality control results fall outside the range as established by the individual laboratory.

### TROUBLE SHOOTING

If performance is unacceptable, try to recalibrate. Check reagents and procedure. If the problem persists, please contact instrument supplier or reagent supplier.

1. Cobas® is a registered trademark of F. Hoffman-La Roche Ltd, Basel, Switzerland
2. "The cobas c501 module and the cobas c502 module are modular parts for the cobas 8000 modular analyser series and the cobas 6000 analyser series, respectively"



## APPLICATION PARAMETERS

Analyze	Calib.			Range			Other				
Assay/Time/Point	2Point End			10	37	70	0	0			
Wavelength(2nd/Prl.)	800			570							
Sample Volume				Cassette Configuration							
Norm.	3.0	0.0	0	Code			#####				
Dec.	15.0	3.0	105	Expiration Days			99				
Inc.	6.0	0.0	0	Reagent Volume							
Dilution				R1	150	0	Inactive				
o Water				R2	0	0	Inactive				
• Diluent	Saline			R3	50	0	Inactive				
Linearity Limit				%				%			
Prozone Limit	-100			0	36	37	64	65	Inside	100	0
Abs.Limit	32000			Increase							
Cell Detergent	*1			Stirring Level			2				
Stirring Setting				M1	M2	M3					
UP	Stirring			LOW	Stirring	Stirring	Stirring				

### \*1: Alkaline detergent

Analyze	Calib.			Range			Other			
Calibration Type	Spline			Auto Calibration						
Point	6			o Timeout						
Span	6			Cassette						
Weight	0			Cancel			0 Day			
Update Type	None			0			0			
SD Limit	50			Changeover						
Duplicate Limit	99 %			32000			Abs.			
Sensitivity Limit	-99999			99999			o QC Violation			
S1 Abs. Limit	-32000			32000			Method			Blank
							Rule			1s
							Control1			None
							Control2			None
							Control3			None
o Auto Masking										

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Analyze	Calib.	Range	Other
Application Code	###	Expected Values	
Unit	ng/mL	Male	
Report Name	NGAL		-99999 999999
Data Mode	Active	99	Year -99999 999999
<input type="checkbox"/> Automatic Rerun		100	Year -99999 999999
Technical Limit	-9999 5000	Female	
Report Limit	-9999 99999		-99999 999999
<input type="checkbox"/> Control Interval Time	0	99	Year -99999 999999
<input type="checkbox"/> Automatic QC On Board Stability	1	100	Year -99999 999999
<input type="checkbox"/> Qualitative		Default	
(1) 0	L 0	Sex	
(2) 0	H 0	<input type="radio"/> Male <input type="radio"/> Female	
(3) 0	I 0	Range	
(4) 0		<input type="radio"/> Range 1 <input type="radio"/> Range 2 <input type="radio"/> Range 3	
(5) 0			
(6) 0			

Analyze	Calib.	Range	Other
Standards			
	(1) (2) (3) (4) (5) (6)		
Calibrator Code	*2 *2 *2 *2 *2 *2		
Concentration	0 150 600 1500 3000 5000		
Rack No.-Pos	*2 *2 *2 *2 *2 *2		
Sample Volume	3.0 3.0 3.0 3.0 3.0 3.0		
Diluted S.Volume	0.0 0.0 0.0 0.0 0.0 0.0		
Diluent Volume	0 0 0 0 0 0		

\*2: To be defined by operator

