

Nephchem PROCALCITONIN

(Nephelometry method)



KIT NAME	KIT SIZE	CAT. NO
Nephchem – PCT	25 Tests	NPCT01025T

INTRODUCTION

In vitro test for the quantitative determination of procalcitonin (PCT) in human serum

METHOD PRINCIPLE

Procalcitonin (PCT) comes from the single copy gene locating on the No. 11 chromosome (11p15,4). The gene consists of 280 base pairs, including 6 exons and 5 introns.

Procalcitonin (PCT) is an important inflammatory mark that reflects general infection. PCT test supplies meaningful reference information for the diagnosis, treatment and prognosis assessment of clinical infectious diseases, and reasonable use of antimicrobial agents[1].

KIT CONTENTS

Reagent kit - box	
R1 - PCT buffer	1 x 18.4 ml
R2 - PCT antibody	1 x 6.1 ml
Test Card	1 no
Accessories kit box	
Cuvettes	100 nos
Big tips	100 nos
small tips	200 nos

Working reagent preparation and stability

Reagent R1 and R2 are ready to use liquid stable at 2-8°C till the expiry date printed on the package.

Concentrations in the test

R1 - Glycine buffer solution.

R2 - Latex suspension, (Concentration is 0.2%)

Warnings and notes

1. The Kit is for *in vitro* diagnostic use only. Not for use in humans or animals.
2. The instructions must be followed to obtain accurate results.
3. Do not use the reagents beyond the expiration date.
4. Treat all specimens as infectious. Proper handling and disposal procedures of specimens and test materials should be strictly followed.
5. Reagents contain less than 0.1% sodium azide as preservative; avoid contact with skin and eyes, flush with copious amounts of water when disposing.

SPECIMEN

Follow standard laboratory procedures to collect serum samples.

It is recommended to perform test immediately after sample collection. If the test cannot be done immediately, store sample at 2- 8° C for up to 1 day or at -80° C for up to 6 months. Avoid repeated freezing and thawing.

PROCEDURE

It is very important for antigen-antibody reaction needs the pre-warm of both reagents and samples. Along with GB NEPHCHEM equipment, dry bath incubator will be provided, in that dedicated R1, R2 and sample positions were available. Please use the respective positions for desired pre-warm temperature of 37°C

Step 1: Insert Test Card to Card reader slot and display will show promptly add R1 + S (sample)

Step 2: Pipette out 180 µl of R1 into dedicated cuvette and add 5 µl of sample (serum) and place the cuvette in the reading chamber

Step 3: After the incubation, the display will show promptly add R2

Step 4: Pipette out 60 µl of R2 using sensor pipette connected with machine into the cuvette

Step 5: Once the reaction time got over, the result will show in the display and (if external printer connected then it will get print out)

REFERENCE VALUES

>0.5 ng/mL

It is recommended for each laboratory to establish its own reference ranges for local population.

QUALITY CONTROL

To ensure adequate quality control, each kit can be cross checked with commercially available third party Immunological quality control or use recommended GB Immunology Quality control.

PERFORMANCE CHARACTERISTICS

- **Linearity:** 0.2 to 50 ng/mL _
- **Precision:** \leq 15%
- **Accuracy:** the result should be within the target value of \leq 15% when the fixed value quantity control serum sample is measured

WASTE MANAGEMENT

Please refer to local legal requirements.

LITERATURE

1. Viallon A, Guyomarch S, Marjollet O, et al. Can emergency Physicians identify a high mortality subgroup of patients with sepsis:role of procalcitonin[J]Eur Emerg Med,2008, 15(1):26-33
2. Kyung-Eun Kim, M.D. And Jin-Yeong Han, M.d., Evaluation of the Clinical Performance of an Automated Procalcitonin Assay for the Quantitative



Genuine Biosystem Private Limited

Plot No.97 & 98, kattabomman street, Parvathy Nagar Extension, Old Perungalathur, Chennai - 600063, India. Ph: +91-44-48681845

Email: genuinebiosystem@gmail.com
website: www.genuinebiosystem.com