

# NG-Test CARBA 5

KPC, OXA-48-like, VIM, IMP, NDM Carbapenemases  
**Detection & Characterisation**



## Rapid

- Results in 15 minutes
- { **From bacterial culture**  
**From direct blood culture\***
- Minimal hands on time



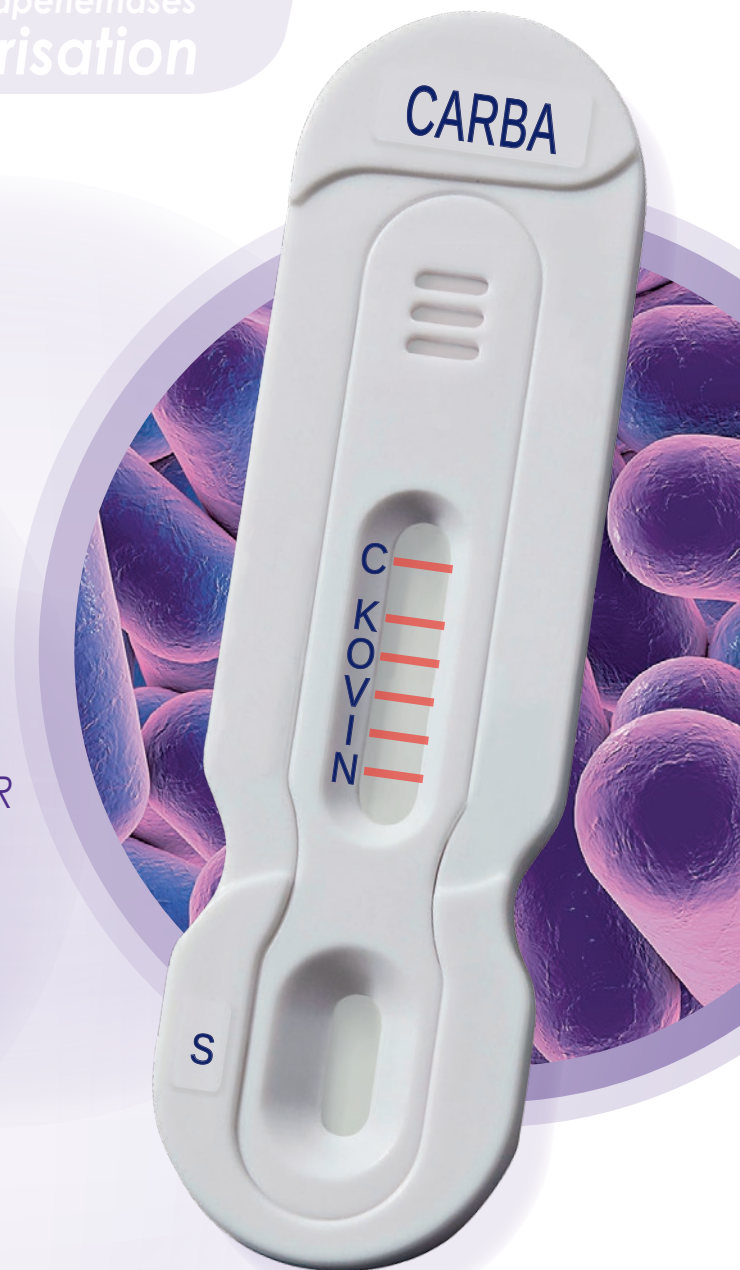
## Accurate

- Excellent correlation with PCR
- Numerous studies available



## User friendly

- Minimal training needs
- No equipment needed
- No maintenance costs
- Stable at room temperature



In use Worldwide in Microbiology labs  
and National Reference Centers



| Product                    | Specimen | Format   | Packaging | Storage | Shelf-life | Cat. Ref.       |
|----------------------------|----------|----------|-----------|---------|------------|-----------------|
| NG-Test CARBA 5            | Culture  | Cassette | 20 tests  | 4-30°C  | 24 months  | NGB-CAR-S23-002 |
| NG-Test Blood Culture Prep | Culture  | Vials    | 20 tests  | 20-30°C | 24 months  | NGP-CAR-S73-002 |

## Performance Characteristics

### Detection limit

The detection limits were determined using purified recombinant enzymes:

|     |          |
|-----|----------|
| KPC | 600pg/mL |
| OXA | 300pg/mL |
| VIM | 300pg/mL |
| IMP | 200pg/mL |
| NDM | 150pg/mL |

### Clinical Evaluation

NG-Test CARBA 5 was evaluated at the NRC (AMR French Referent Center, Kremlin-Bicêtre Hospital, Paris, France) during a prospective study.

116 strains were blind-tested and the results were compared to the PCR sequencing test. One IMI-producing isolate was excluded from the result analysis because this type is not in the device intended use.

|                 |          | PCR      |          |       |
|-----------------|----------|----------|----------|-------|
|                 |          | Positive | Negative | Total |
| NG-test CARBA 5 | Positive | 70       | 0        | 70    |
|                 | Negative | 0        | 45       | 45    |
|                 | Total    | 70       | 45       | 115   |

Sensitivity : 100% CI 95% = 93,5% - 100%  
Specificity : 100% CI 95% = 90,4% - 100%

A retrospective evaluation performed at the NRC on 180 isolates characterised by PCR permitted to identify variants detected by NG-Test CARBA 5:

Type NDM : NDM-1 -4 -5 -6 -7 -9

Type KPC : KPC-2 -3

Type IMP : IMP-1 -8 -11

Type VIM : VIM-1 -2 -4 -19

OXA-48-like : OXA-48 -162 -181 -204 -232 -244 -517 -519 -535

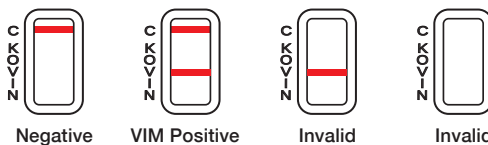
Non-carbapenemases (cross-reactivity) : OXA-163 and OXA-405 (OXA-48-like extended spectrum oxacillinases with very weak carbapenemase activity).



NG-Test CARBA 5



## Interpretation



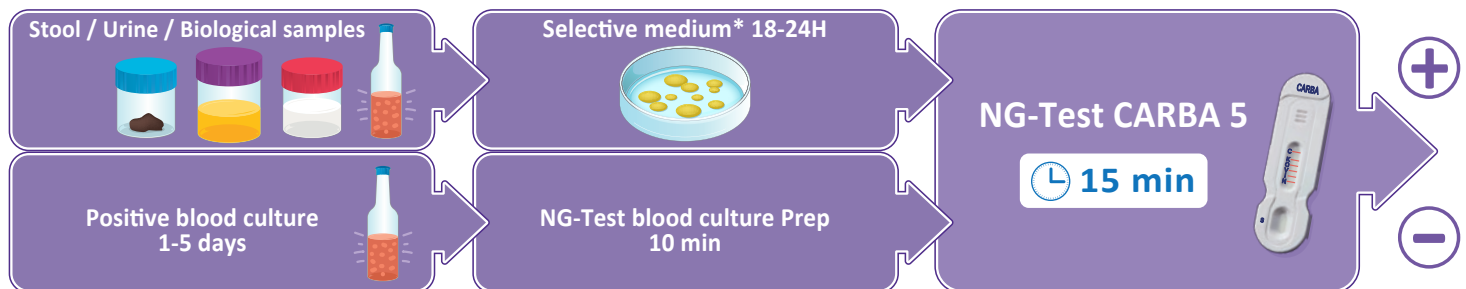
NOTE: Multiple lines or one line on K, O, V, I, N position must be considered as a positive result



These tests were developed in collaboration with the CEA\*.

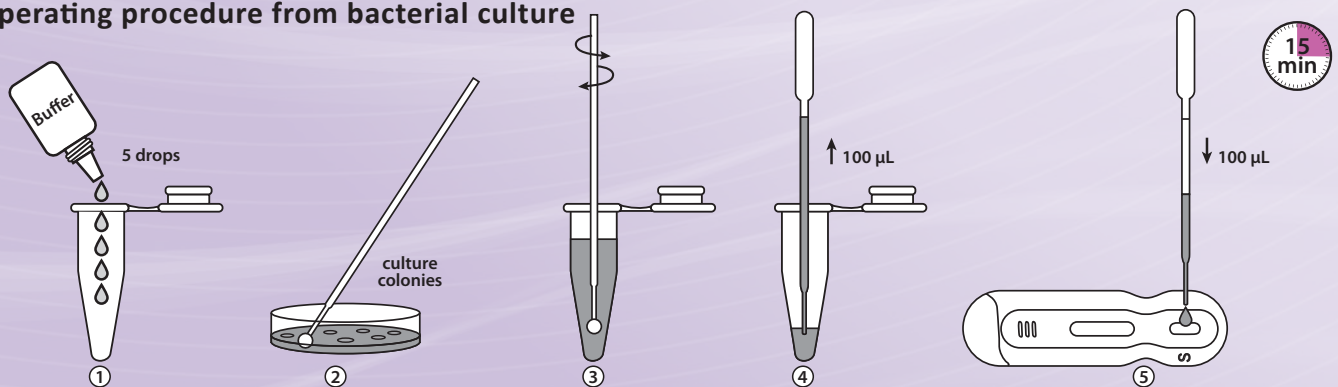
\*The French Alternative Energies and Atomic Energy Commission (CEA) is a key player in research, development and innovation.

## IDENTIFICATION PROCESS FROM BACTERIAL CULTURE OR DIRECT BLOOD CULTURE



\*Validated on: TSA, Mueller Hinton, ChromID® CARBA SMART, Drigalski (DRIG) CHROMagar™ mSuperCARBA™...etc

## Operating procedure from bacterial culture



For professional in vitro diagnostic use only