

Evaluation of Rosco Diagnostica Rapid CARB Screen kit, for detection of carbapenemase activity. London 2013

48 isolates of *Enterobacteriaceae* and *P. aeruginosa* with previously characterized resistance mechanisms including the following carbapenemases: IMI, IMP, VIM, OXA-48, OXA-181, KPC and NDM as well as non- carbapenemase (8 isolates). The authors found a sensitivity of 92.5% and a specificity of 92.5%.

Table: Isolates tested in this evaluation

	Genus/species	Enzyme/resistance mechanism(s)	Reader 1			control	Reader 2		Interpretation
			30 min	1 hr	2 hr		30 min	1 hr	
	<i>Enterobacter cloacae</i>	non-carbapenemase	red	red	red	n.a.	red	red	negative
	<i>Escherichia coli</i>	non-carbapenemase	red/orange	red/orange	red/orange	red	-	-	negative
	<i>Pseudomonas aeruginosa</i>	non-carbapenemase	red/orange	red/orange	red/orange	red/orange	-	-	Undeterminable Negative
	<i>Klebsiella pneumoniae</i>	non-carbapenemase	red/orange	red/orange	red/orange	red	-	-	negative
	<i>Klebsiella pneumoniae</i>	non-carbapenemase	red	red	red	n.a.	red	red	negative
	<i>Enterobacter cloacae</i>	non-carbapenemase	yellow/red	red	red	n.a.	red	red	negative
	<i>Klebsiella pneumoniae</i>	non-carbapenemase	red	red	red	n.a.	red	red	negative
	<i>Pseudomonas aeruginosa</i>	non-carbapenemase	red	red	red	n.a.	-	-	negative
	<i>Enterobacter cloacae</i>	IMI	yellow	-	-	n.a.	-	-	positive
	<i>Enterobacter cloacae</i>	IMI	yellow/red	yellow/red	yellow/red	n.a.	yellow	-	positive
	<i>Enterobacter aerogenes</i>	IMP	red/orange	red/orange	red/orange	red	-	-	negative
	<i>Klebsiella pneumoniae</i>	IMP	yellow	-	-	n.a.	yellow	-	positive
	<i>Klebsiella pneumoniae</i>	IMP	yellow	-	-	n.a.	yellow	-	positive
	<i>Pseudomonas aeruginosa</i>	IMP	yellow	-	-	n.a.	yellow	-	positive
	<i>Escherichia coli</i>	IMP	yellow	-	-	n.a.	yellow/orange	-	positive
	<i>Klebsiella pneumoniae</i>	VIM	yellow	-	-	n.a.	yellow	-	positive
	<i>Enterobacter gergoviae</i>	VIM	yellow	-	-	n.a.	yellow	-	positive
	<i>Pseudomonas aeruginosa</i>	VIM	yellow	-	-	n.a.	-	-	positive

	<i>Escherichia coli</i>	VIM	yellow	-	-	n.a.		-	positive
	<i>Pseudomonas aeruginosa</i>	VIM	yellow	-	-	n.a.		-	positive
	<i>Klebsiella pneumoniae</i>	OXA-48	red	red	red	n.a.	red	red	negative
	<i>Escherichia coli</i>	OXA-48	yellow	-	-	n.a.	yellow	-	positive
	<i>Citrobacter freundii</i>	OXA-48	yellow	-	-	n.a.	yellow	-	positive
	<i>Citrobacter freundii</i>	OXA-48	yellow	-	-	n.a.	yellow	-	positive
	<i>Klebsiella pneumoniae</i>	OXA-48	yellow	-	-	n.a.	yellow	-	positive
	<i>Enterobacter sp.</i>	OXA-48	yellow	-	-	n.a.	yellow	-	positive
	<i>Escherichia coli</i>	OXA-48	yellow	-	-	n.a.	yellow/orange	-	positive
	<i>Escherichia coli</i>	OXA-181	red/orange	red/orange	red/orange	red/orange	-	-	<i>Undeterminable Negative</i>
	<i>Pseudomonas aeruginosa</i>	OXA-181	yellow	-	-	n.a.	yellow	-	positive
	<i>Klebsiella pneumoniae</i>	KPC-2	yellow	-	-	n.a.	yellow	-	positive
	<i>Klebsiella pneumoniae</i>	KPC-2	yellow	-	-	n.a.	yellow	-	positive
	<i>Enterobacter cloacae</i>	KPC-4	yellow/red	yellow	-	n.a.	yellow	yellow	positive
	<i>Klebsiella pneumoniae</i>	KPC-2	yellow	-	-	n.a.	yellow	-	positive
	<i>Escherichia coli</i>	KPC	yellow	-	-	n.a.	yellow	-	positive
	<i>Klebsiella pneumoniae</i>	KPC-2	yellow	-	-	n.a.	yellow	-	positive
	<i>Escherichia coli</i>	KPC	yellow	-	-	n.a.	yellow	-	positive
	<i>Escherichia coli</i>	KPC	yellow	-	-	n.a.	-	-	positive
	<i>Enterobacter cloacae</i>	KPC-2	yellow	-	-	n.a.	yellow	-	positive
	<i>Klebsiella pneumoniae</i>	KPC-2	yellow	-	-	n.a.	-	-	positive
	<i>Citrobacter freundii</i>	NDM-1	yellow/red	yellow	-	n.a.	yellow	yellow/red	positive
	<i>Morganella morganii</i>	NDM	yellow	-	-	n.a.	yellow	-	positive
	<i>Klebsiella pneumoniae</i>	NDM	yellow	-	-	n.a.	yellow	-	positive
	<i>Escherichia coli</i>	NDM	yellow	-	-	n.a.	-	-	positive
	<i>Serratia marcescens</i>	NDM	yellow	-	-	n.a.	yellow	-	positive
	<i>Pseudomonas aeruginosa</i>	NDM	yellow	-	-	n.a.	yellow	-	positive
	<i>Escherichia coli</i>	NDM-7	yellow	-	-	n.a.	-	-	positive
	<i>Pseudomonas aeruginosa</i>	NDM	yellow	-	-	n.a.	-	-	positive
	<i>Enterobacter. aerogenes</i>	NDM	yellow	-	-	n.a.	-	-	positive