

Supplementary Information

# Susceptibility of the Different Oxygen-Sensing Probes to Interferences in Respirometric Bacterial Assays with Complex Media

Chiara Zanetti <sup>1</sup>, Liang Li <sup>1</sup>, Rafael Di Lazaro Gaspar <sup>2</sup>, Elisa Santovito <sup>3</sup>, Sophia Elisseeva <sup>1</sup>, Stuart G. Collins <sup>4</sup>, Anita R. Maguire <sup>4</sup> and Dmitri B. Papkovsky <sup>1,\*</sup>

<sup>1</sup> School of Biochemistry and Cell Biology, University College Cork, Pharmacy Building, College Road, T12 K8AF Cork, Ireland; czanetti@ucc.ie (C.Z.); liang.li@ucc.ie (L.L.)

<sup>2</sup> Cell Analysis Division, Agilent Inc., Euro House, Little Island, T45 WK12 Cork, Ireland; rafael.gaspar@agilent.com

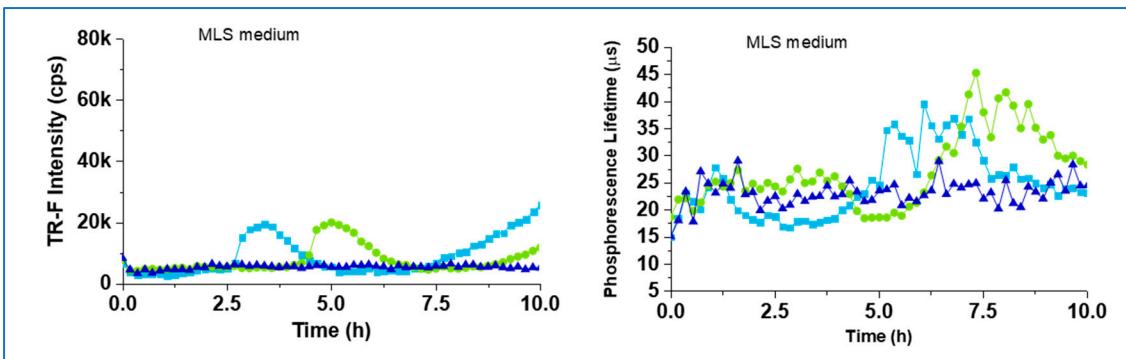
<sup>3</sup> National Research Council of Italy, Institute of Sciences of Food Production, Via Amendola 122/O, 70126 Bari, Italy; elisa.santovito@ispa.cnr.it

<sup>4</sup> School of Chemistry, University College Cork, Pharmacy Building, College Road, T12 YN60 Cork, Ireland; stuart.collins@ucc.ie (S.G.C.); a.maguire@ucc.ie (A.R.M.)

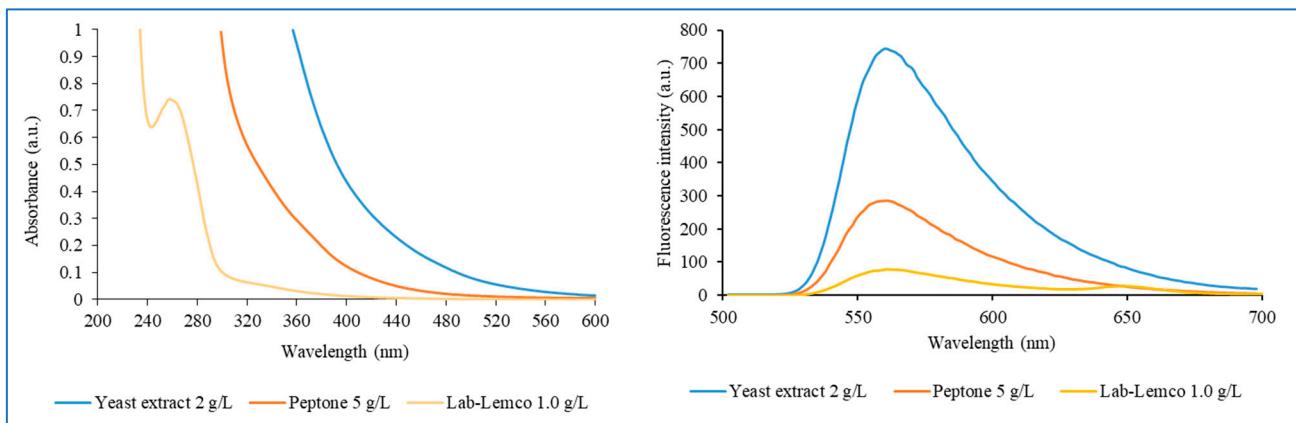
\* Correspondence: d.papkovsky@ucc.ie; Tel.: +353-21-490-1698

**Table S1.** Composition of the different media.

Selective Media	Ingredient	Concentration
Nutrient Broth (NB)	“Lab-lemco” Powder	1.0 g/L
	Peptone	5.0 g/L
	Sodium chloride	5.0 g/L
	yeast extract	2.0 g/L
MacConkey (MC)	Bile salts	5.0 g/L
	neutral red	0.075 g/L
	Peptone	20.0 g/L
	Sodium chloride	5.0 g/L
M-Lauryl Sulfate (MLS)	phenol red	0.2 g/L
	sodium lauryl sulfate	1 g/L
	yeast extract	6 g/L
	lactose	30 g/L
Rapid Coliform ChromoSelect (RCC)	X-gal	0.08 g/L
	MUG (4-Methylumbelliferyl α-D-glucuronide)	0.05 g/L
	IPTG	0.1 g/L
	Peptone	5 g/L
	dipotassium hydrogen phosphate	2.7 g/L
	potassium dihydrogen phosphate	2 g/L
	sodium lauryl sulfate	0.1 g/L
	sorbitol	1 g/L
Minerals Modified Glutamate (MMG)	sodium chloride	5 g/L
	bromocresol purple	0.02 g/L
	ferric ammonium citrate	0.02 g/L
	magnesium sulfate	0.2 g/L
	nicotinic acid	0.002 g/L
	lactose	20 g/L
	pantothenic acid	0.002 g/L
	sodium formate	0.5 g/L
	calcium chloride	0.02 g/L
	L-cystine	0.04 g/L
	dipotassium phosphate	1.8 g/L
	L-arginine	0.04 g/L
L-aspartic acid	L-aspartic acid	0.048 g/L
	thiamine	0.002 g/L



**Figure S1.** Blank-corrected respiration profiles of the Int and LT signals for *E. coli* cells in MLS media, produced by PtGlc4 shown in Figure 3E.



**Figure S2.** Absorption and fluorescence spectra of yeast extract (2.0 g/L), peptone (5.0 g/L) and Lab-Lemco (1.0 g/L) in PBS buffer.