

Mean absolute errors and mean absolute percentage errors in the number of exchanged electrons of model antioxidants in different antioxidant assays.

		DPPH <sup>•</sup>				ABTS <sup>•+</sup>		
		MeOH	H <sub>2</sub> O	pH 5	pH 7.4	H <sub>2</sub> O	pH 5	pH 7.4
DPPH <sup>•</sup>	H <sub>2</sub> O	0.4 (12%)						
	pH 5	0.7 (20%)	0.3 (9%)					
	pH 7.4	2.6 (93%)	2.4 (78%)	2.1 (65%)				
ABTS <sup>•+</sup>	H <sub>2</sub> O	0.5 (16%)	0.5 (11%)	0.4 (10%)	2.4 (75%)			
	pH 5	1.1 (27%)	0.7 (15%)	0.5 (12%)	2.2 (72%)	0.7 (13%)		
	pH 7.4	2.1 (52%)	1.7 (36%)	1.4 (30%)	1.8 (57%)	1.7 (33%)	1.0 (20%)	
FC		2.8 (120%)	2.5 (101%)	2.2 (87%)	1.3 (29%)	2.5 (99%)	2.3 (95%)	2.6 (83%)

Large difference in the reactivity can be exemplified by mean absolute errors and mean absolute percent errors in the number of exchanged electrons for model antioxidants for each combination of the antioxidant assay. Despite excellent correlations as determined for ABTS assays in water and buffer pH 7.4 ( $r = 0.99$ ; significant at  $\alpha = 0.001$ ) there is still large difference in the average number of exchanged electrons ( $MAE = 1.7$ ) with  $MAPE$  of 33%. Even larger errors are between variants of DPPH assay.