

Fig. S1A

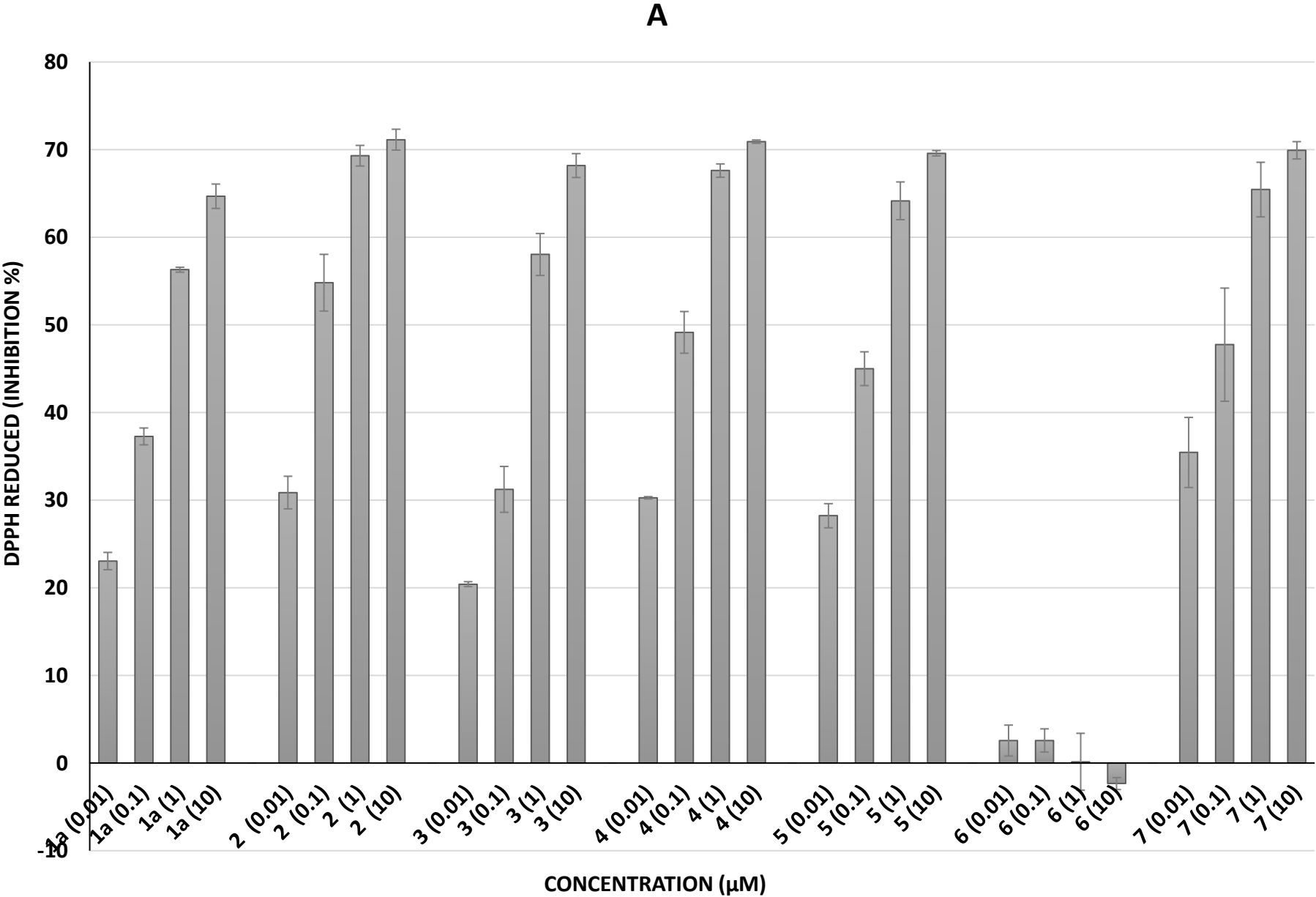


Fig. S1B

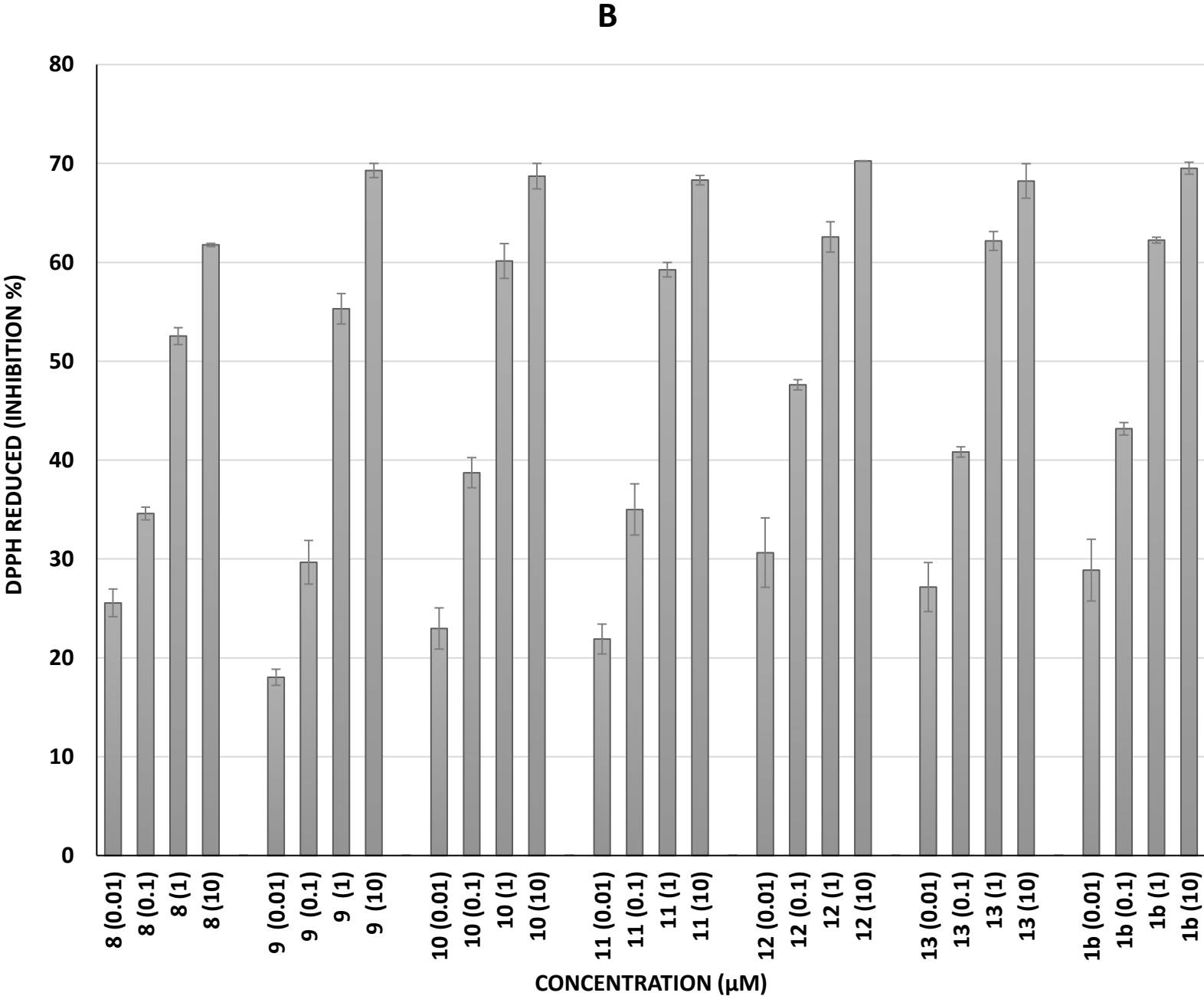


Fig. S2A

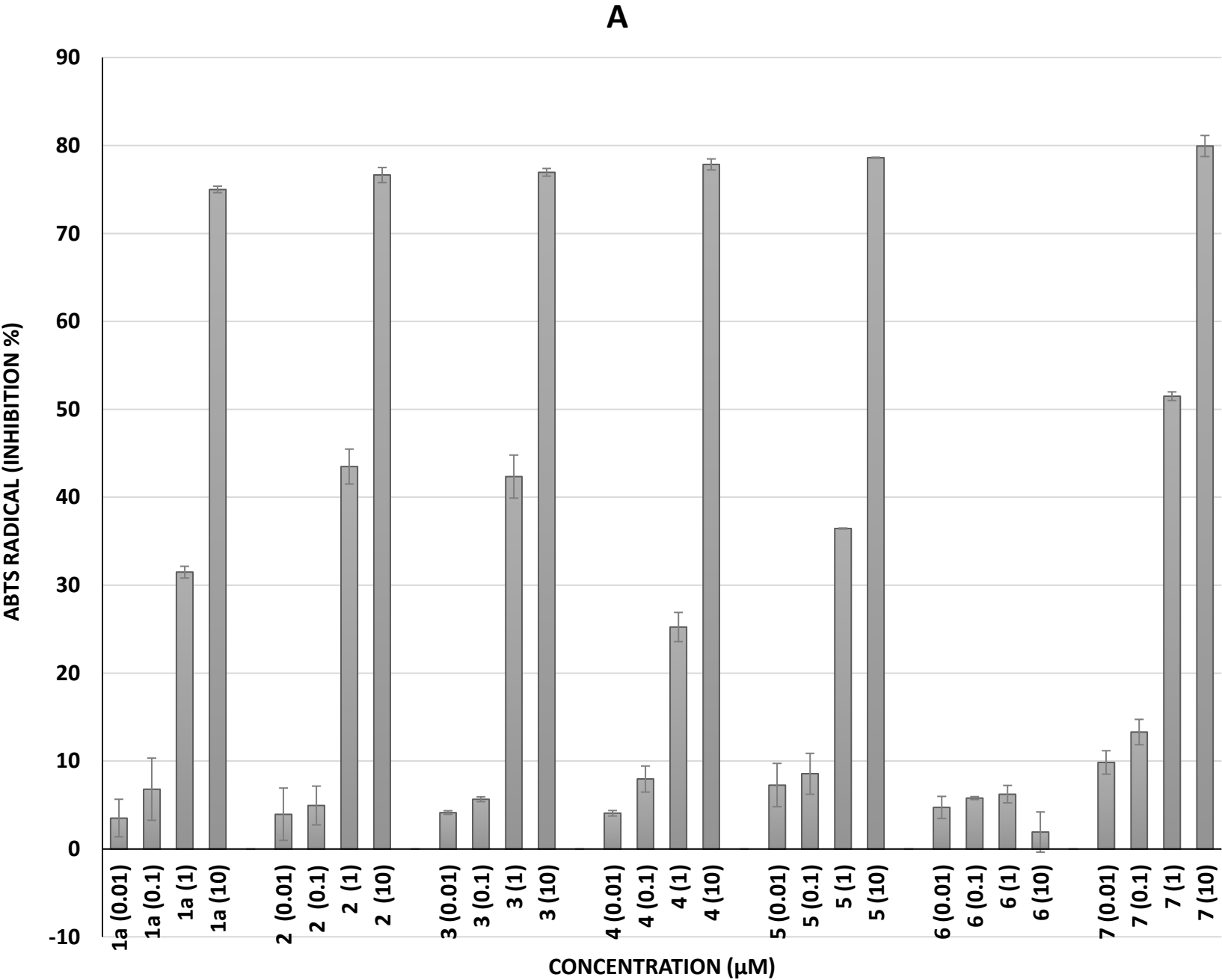
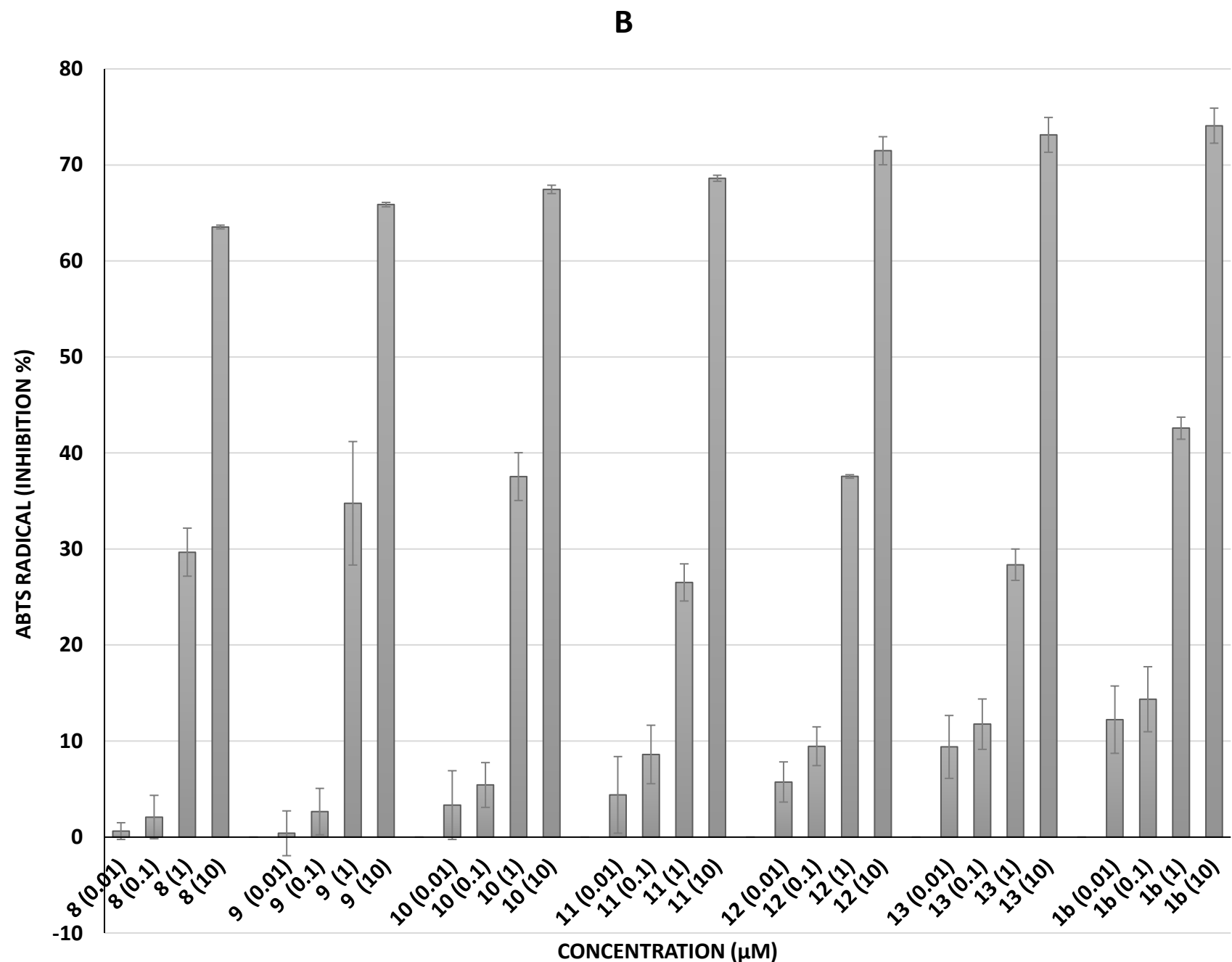


Fig. S2B



A

Fig. S3A

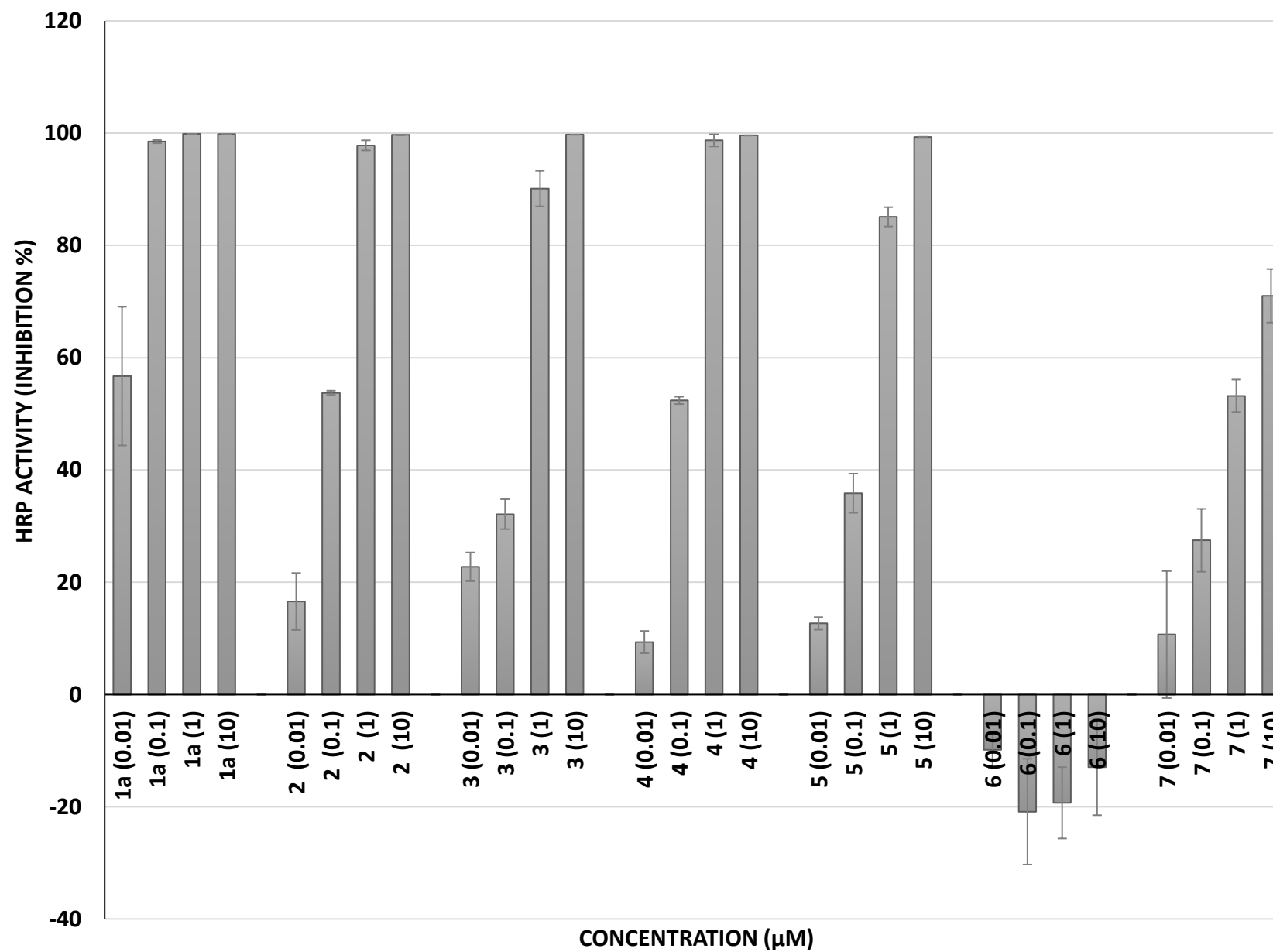
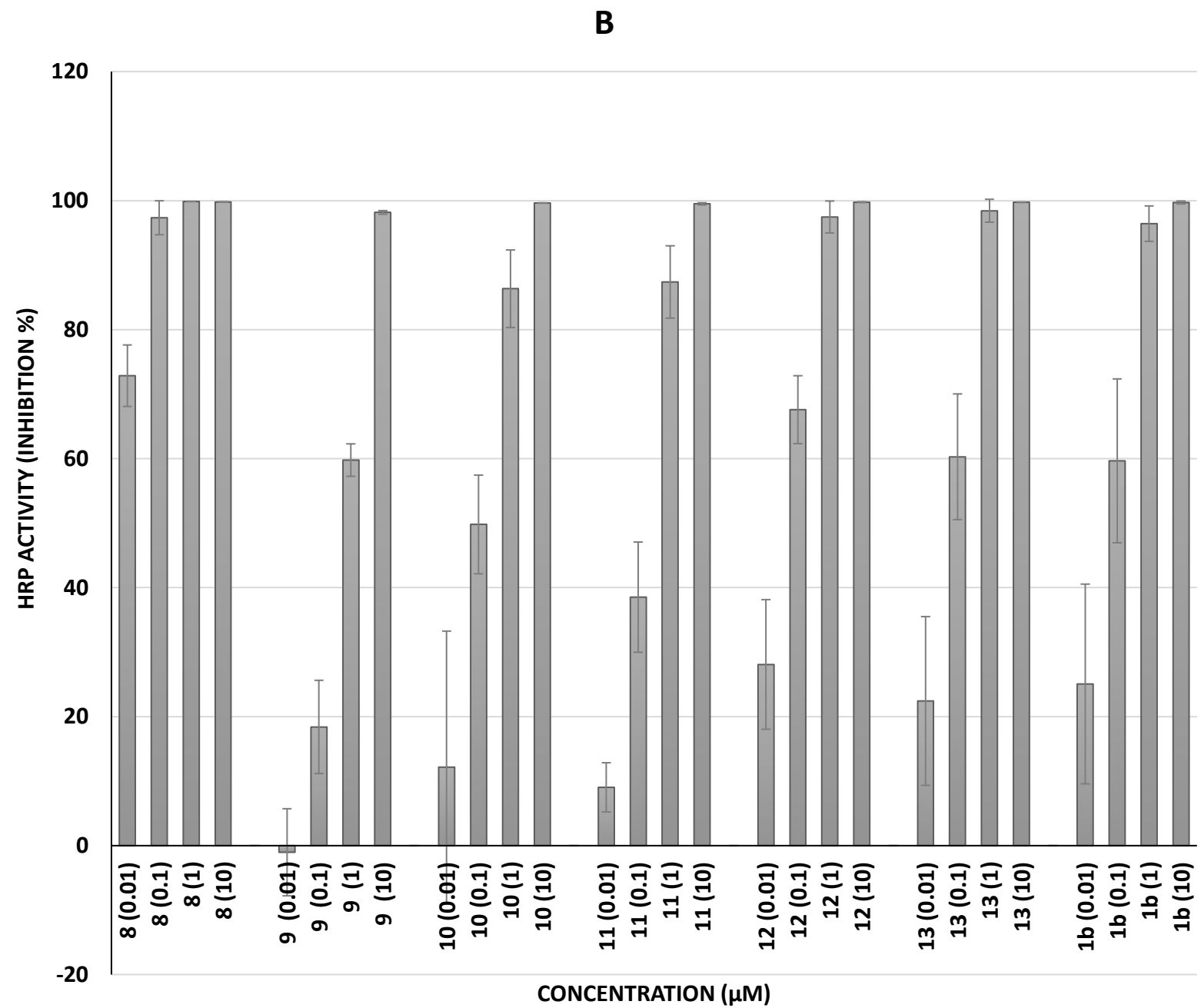
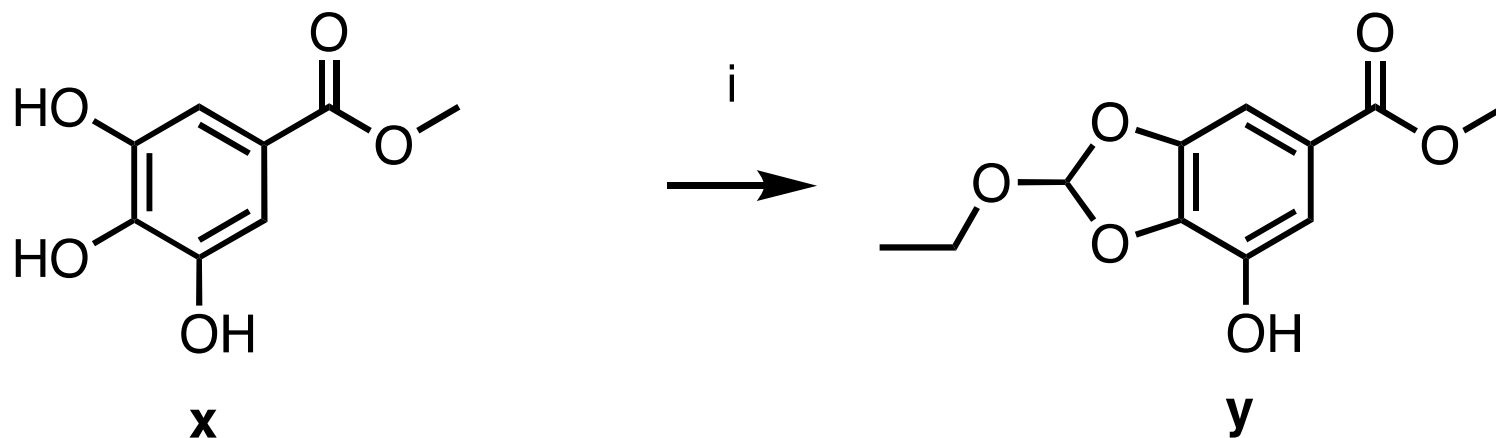


Fig. S3B



Supplementary material: Synthesis of Methyl 2-ethoxy-7-hydroxybenzo[*d*][1,3]dioxole-5-carboxylate (**y** = **Protected methyl gallate, 11**).



Scheme A. i: $\text{HC}(\text{OEt})_3$, 160°C .

A mixture of methyl 3,4,5-trihydroxybenzoate (**x**, 5.00 g, 27.2 mmol) in triethylorthoformate (5.0 ml) is heated under stirring in an open vessel at 160°C . After 4 hours, the mixture is cooled down and evaporated under vacuo. The residue is crystallised in toluene. The obtained crystals are washed with hexane to yield **y** (3.44 g, 14.3 mmol, 52.7%). Elemental analysis: C 55.14 (55.00), H 5.05 (5.04). ^1H NMR (500 MHz, DMSO) δ 10.27 (s, 1H, Ar-OH), 7.19 (d, $J = 1.6$ Hz, 1H, 6-*H*), 7.17 (s, 1H, C-*H*), 7.01 (d, $J = 1.6$ Hz, 1H, 4-*H*), 3.79 (s, 3H, CH_3), 3.70 (q, $J = 7.1$ Hz, 2H, CH_2CH_3), 1.17 (t, $J = 7.1$ Hz, 3H, CH_2CH_3).