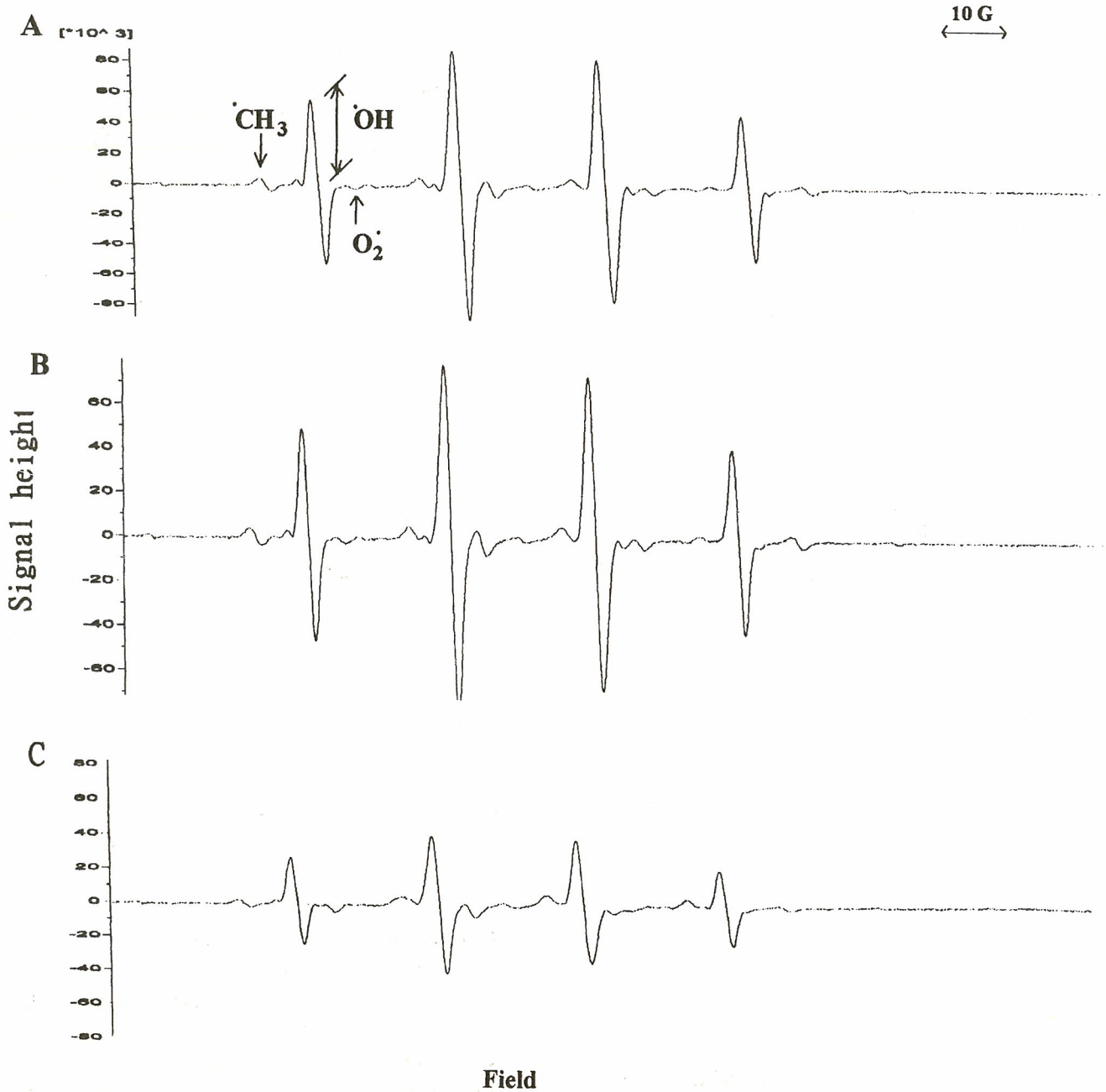

Fig. 4. Effect of metallothionein on free radical-scavenging activity in the H_2O_2/NaOH/DMSO system. (**A**) Typical ESR spectrum in the H_2O_2/NaOH/DMSO system. ESR conditions are described in "Materials and Methods". Scanning was begun 10 min after the mixing of all reagents. Each free radical-derived signal was assigned, and signal heights were calculated in the figure. The intensity of the hydroxyl radical was much stronger (quarted signal peaks) than those of the superoxide anion and methyl radical peaks. ESR spectra of free radical-scavenging activity of metallothionein (**B**) (10 μM) and (**C**) (20 μM). The inhibition rate of metallothionein is defined by the following equation: inhibition rate = 1 – [signal height (metallothionein)/signal height (control)]. The spectra are representative examples of five similar experiments.