

Supplementary material

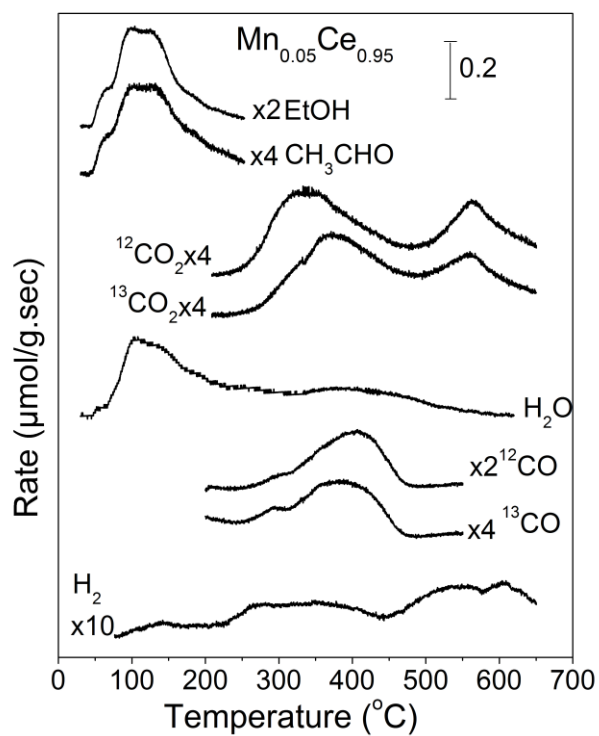


Figure S1. TPD profiles following $^{12}\text{CH}_3^{13}\text{CH}_2\text{OH}$ adsorption on $\text{Mn}_{0.05}\text{Ce}_{0.95}$ catalyst

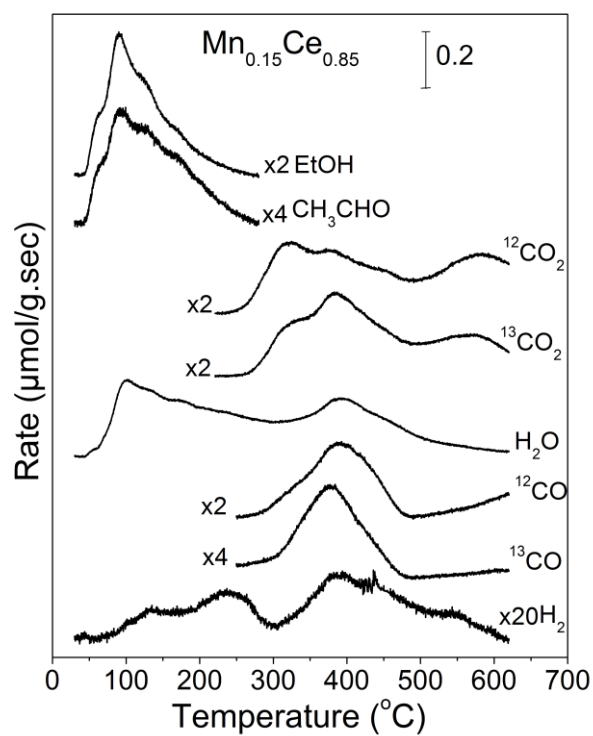


Figure S2. TPD profiles following $^{12}\text{CH}_3^{13}\text{CH}_2\text{OH}$ adsorption on $\text{Mn}_{0.15}\text{Ce}_{0.85}$ catalyst

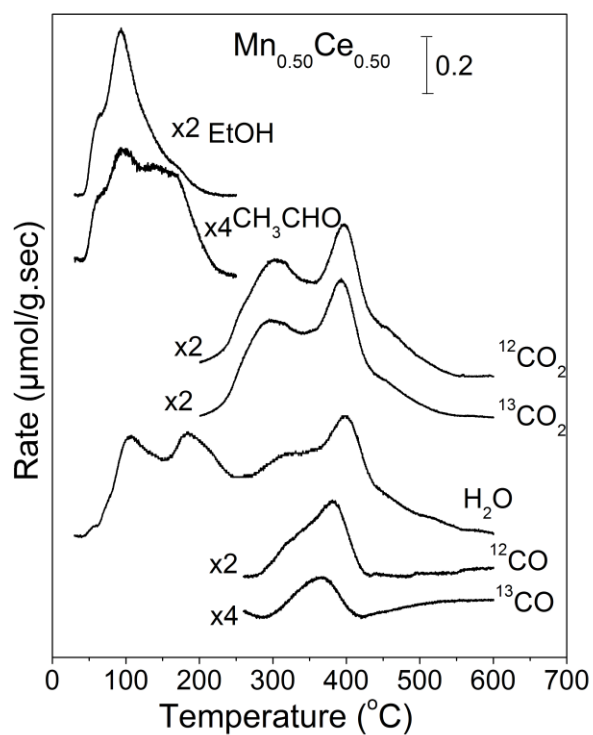


Figure S3. TPD profiles following $^{12}\text{CH}_3^{13}\text{CH}_2\text{OH}$ adsorption on $\text{Mn}_{0.50}\text{Ce}_{0.50}$ catalyst

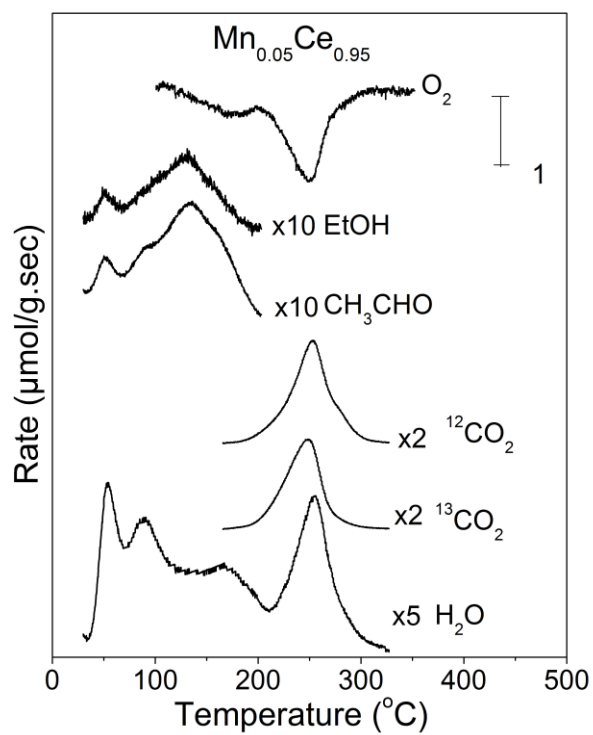


Figure S4. TPO profiles following $^{12}\text{CH}_3^{13}\text{CH}_2\text{OH}$ adsorption on $\text{Mn}_{0.05}\text{Ce}_{0.95}$ catalyst

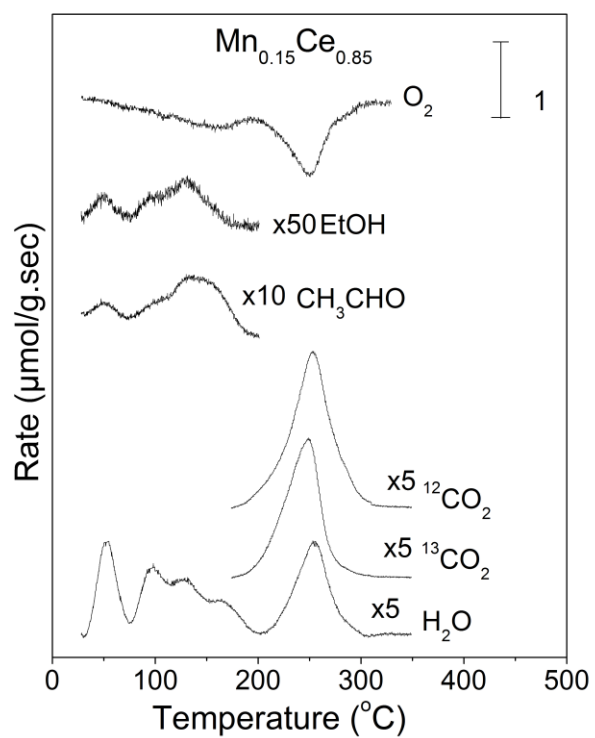


Figure S5. TPO profiles following $^{12}\text{CH}_3^{13}\text{CH}_2\text{OH}$ adsorption on $\text{Mn}_{0.15}\text{Ce}_{0.85}$ catalyst

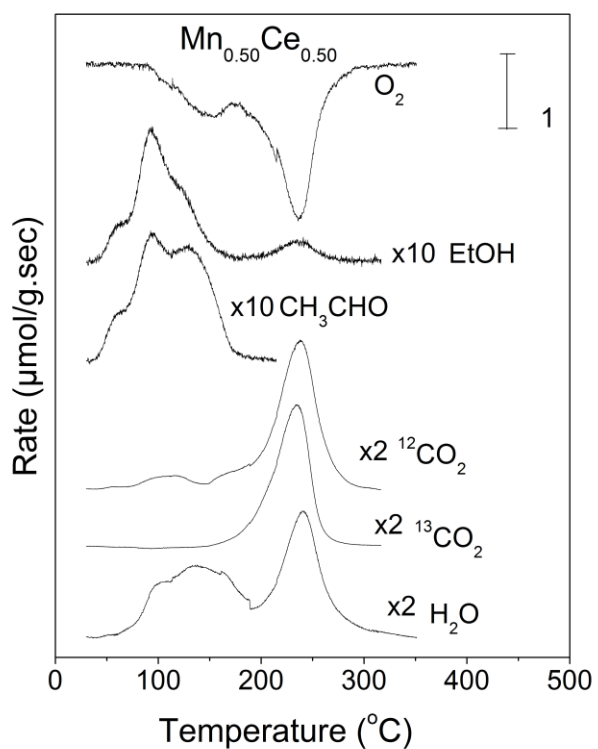


Figure S6. TPO profiles following $^{12}\text{CH}_3^{13}\text{CH}_2\text{OH}$ adsorption on $\text{Mn}_{0.50}\text{Ce}_{0.50}$ catalyst