Supplementary Information

An effective method for detecting nitrous oxide using alkaline washing and GC-MS

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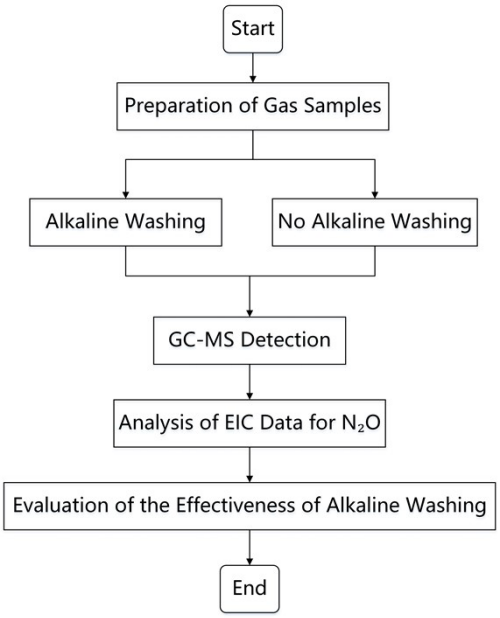

Fig. S1 Overall process flowchart.

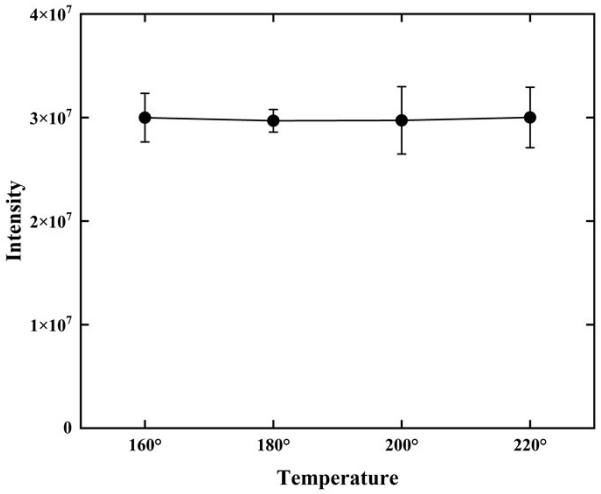

Fig. S2 Injection port temperature optimization.

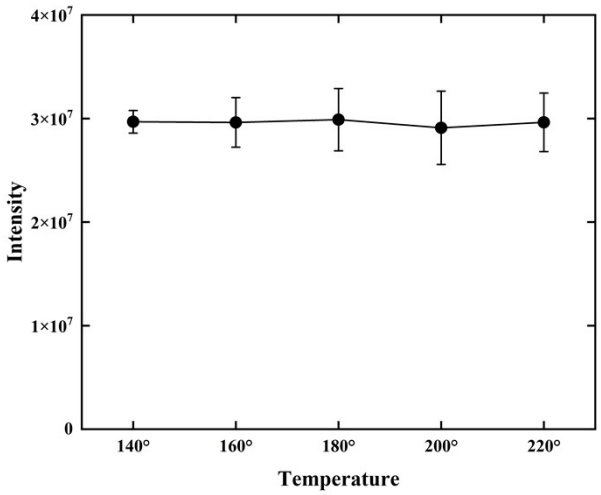

Fig. S3 Column final temperature optimization.

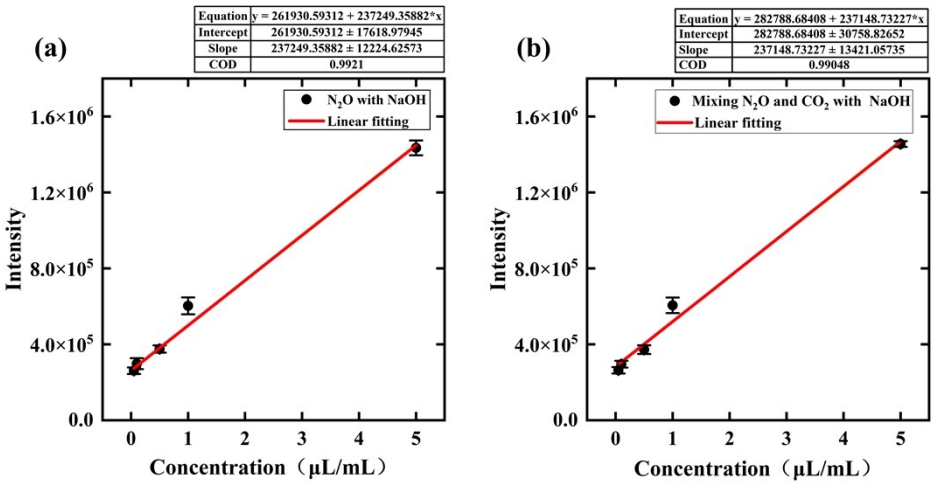

Fig. S4 Linear plot of EIC peak area after low concentration gas alkali washing. (a) Alkali washing with single N_2O gas. (b) Alkali washing with mixed gases of N_2O and CO_2.

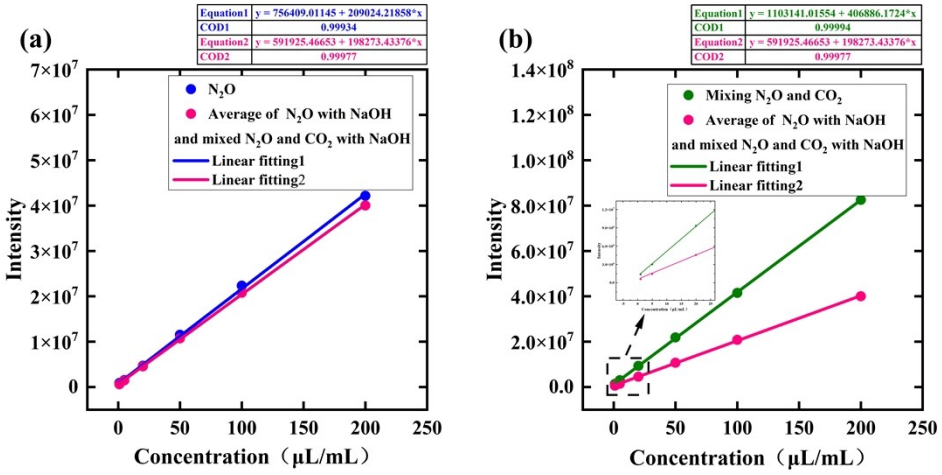

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Fig. S5 Linear comparison of EIC peak area between direct detection and detection of N_2O after alkaline washing. (a) Single N_2O gas in non alkaline washing state. (b) mixed gases of N_2O-CO_2 in non alkaline washing state.

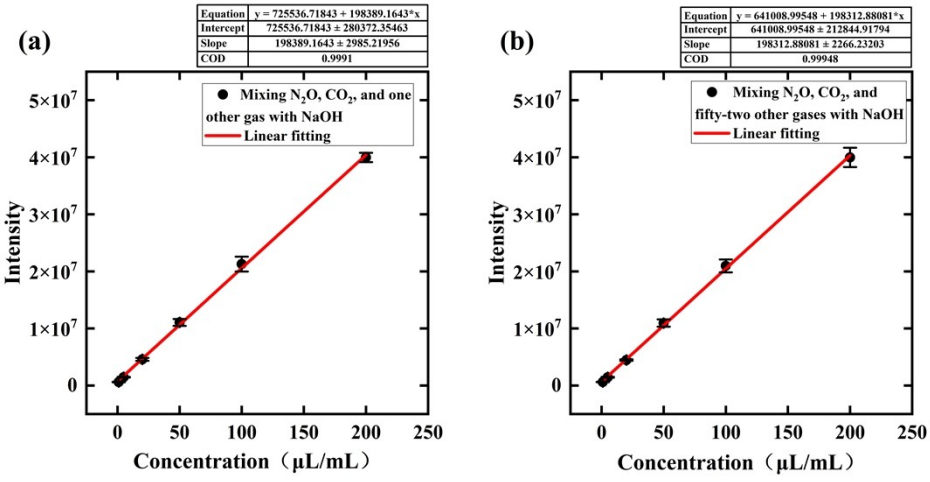

Fig. S6 Linear plot of EIC peak area under impurity gas interference. (a) under one impurity gas condition. (b) Under 52 impurity gas conditions.