
RE: Terasako. Does halothane or sevoflurane inhibit NO-stimulated soluble guanylyl cyclase activity under physiological conditions?**Eiji Masaki**

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To the editor: As Terasako [1] pointed out, we did not use a carrier gas. Instead, the incubation mixture was equilibrated with air (21% O₂) in a 10-ml glass tube using a total volume of 600 μl. The O₂ concentration of the reaction mixture equilibrated with 95% O₂ is indeed different from that of the mixture equilibrated with air, and the effects of halogenated volatile anesthetics on soluble guanylyl cyclase (sGC) in each mixture might differ. However, is the condition in which the mixture is equilibrated with air unphysiologically hypoxic? Many enzymatic assays using the sGC fraction have been performed under the condition of equilibration with air, without any carrier gas such as 95% O₂, 5% CO₂ [2–4]. Although it is not certain how much O₂ was consumed in our mixture, we do not think that incubation with only 0.1 mg soluble fraction protein for 5 min equilibrated with air produced an

unphysiologically hypoxic condition. Actually, the different results from three experiments (Terasako et al., Zuo et al., and ours) may arise from the different methods. The condition of equilibration with air would not be much more unphysiological than that with 95% O₂.

References

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