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Sevoflurane

National Cancer Institute

Source

National Cancer Institute. *Sevoflurane*. NCI Thesaurus. Code C47717.

A fluorinated isopropyl ether with general anesthetic property. Although the mechanism of action has not been fully elucidated, sevoflurane may act by interfering with the release and re-uptake of neurotransmitters at post-synaptic terminals, and/or alter ionic conductance following receptor activation by a neurotransmitter. Sevoflurane may also interact directly with lipid matrix of neuronal membranes, thereby affecting gating properties of ion channels. In addition, this agent may activate gamma-aminobutyric acid (GABA) receptors hyperpolarizing cell membranes. This results in a general anesthetic effect, a decrease in myocardial contractility and mean arterial pressure as well as an increased respiratory rate.