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# Lidocaine Hydrochloride

National Cancer Institute

## Source

National Cancer Institute. *Lidocaine Hydrochloride*. NCI Thesaurus. Code C48000.

The hydrochloride salt form of lidocaine, an aminoethylamide and a prototypical member of the amide class anesthetics. Lidocaine interacts with voltage-gated Na<sup>+</sup> channels in the nerve cell membrane and blocks the transient increase in permeability of excitable membranes to Na<sup>+</sup>. This prevents the generation and conduction of nerve impulses and produces a reversible loss of sensation. Lidocaine hydrochloride also exhibits class IB antiarrhythmic effects. The agent decreases the flow of sodium ions into myocardial tissue, especially on the Purkinje network, during phase 0 of the action potential, thereby decreasing depolarization, automaticity and excitability.