Difenoxin

National Cancer Institute

Source


A phenylpiperidine with antidiarrheal activity and an active metabolite of diphenoxylate.

Difenoxin is chemically related to the narcotic opioid meperidine. Difenoxin acts primarily on the gastrointestinal wall by binding to opioid receptors on acetylcholine-containing nerves and inhibiting the release of acetylcholine from presynaptic nerve terminals. This leads to a reduction in intestinal motility. Difenoxin hydrochloride also mimics the action of endogenous opioid peptides at the CNS opioid receptors, (primarily mu-receptors), thereby inducing CNS effects.