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# Formoterol

National Cancer Institute

## Source

National Cancer Institute. *Formoterol*. NCI Thesaurus. Code C65754.

A long-acting beta-adrenergic receptor agonist with bronchodilator activity. Formoterol selectively binds to beta-2 adrenergic receptors in bronchial smooth muscle, thereby activating intracellular adenylyl cyclase, an enzyme that catalyzes the conversion of adenosine triphosphate (ATP) to cyclic-3',5'-adenosine monophosphate (cAMP). Increased cAMP levels cause relaxation of bronchial smooth muscle, relieve bronchospasms, improve mucociliary clearance and reduce mediator substance release from inflammatory cells, especially from mast cells.