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# Dopamine-Somatostatin Chimeric Molecule BIM-23A760

National Cancer Institute

## Source

National Cancer Institute. *Dopamine-Somatostatin Chimeric Molecule BIM-23A760*. NCI Thesaurus. Code C88345.

A chimeric molecule directed against dopamine and somatostatin receptors with potential antineoplastic activity. Combining two pharmacological moieties, a somatostatin analogue and a dopamine agonist, dopamine-somatostatin chimeric molecule BIM-23A760 binds with high affinity to dopamine D2 receptor (D2R) and somatostatin receptor subtype 2 (SSTR2), and to a lesser extent to somatostatin receptor subtype 5 (SSTR5). This agent appears to exert its effect mainly by binding to D2R to activate the ERK1/2 and p38 MAPK pathways, thus inducing apoptosis and inhibiting cellular proliferation in non-functioning pituitary adenoma (NFPA) and neuroendocrine tumors. By binding to SSTR2, this agent may inhibit the secretion of growth hormone (GH) by the pituitary gland.