Inhibitors, Agonists, Screening Libraries

Data Sheet

Product Name: Proxyphylline
Cat. No.: HY-B1742
CAS No.: 603-00-9
Molecular Formula: C10H14N4O3
Molecular Weight: 238.24
Target: Adenosine Receptor
Pathway: GPCR/G Protein
Solubility: 10 mM in DMSO

BIOLOGICAL ACTIVITY:
Proxyphylline is a methylxanthine derivative clinical used as cardiac stimulant, vasodilator and bronchodilator.

**In Vitro:** Proxyphylline has shown vasodilatory and cardiac stimulatory effects. Proxyphylline produces an increase in the coronary flow associated with a definite positive inotropic effect\(^1\). Proxyphylline inhibits tracheal PDE–activity and half–maximum relaxation of tracheal smooth muscle is obtained with 100 μg/mL proxyphylline\(^2\).

**In Vivo:** In a double–blind cross–over study, proxyphylline exhibits bronchodilatory effect\(^3\). Proxyphylline inhibits cAMP and cGMP hydrolysis in human lung tissue. The apparent inhibition constant of proxyphylline is 0.06–0.7 mM at low cAMP concentrations and it is 1.0 mM at high cAMP concentrations\(^3\).

References:

Caution: Product has not been fully validated for medical applications. For research use only.

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