3-Isobutyl-1-methylxanthine (IBMX), 0.2M

Cell Culture Reagents-Hormone and Ligand

产品编号: CH008

产品描述: Non-specific inhibitor of cAMP and cGMP phosphodiesterases. The increase in cAMP level as a result of phosphodiesterase inhibition by IBMX activates PKA leading to decreased proliferation, increased differentiation, and induction of apoptosis. IBMX inhibits phenylephrine-induced release of 5-hydroxytryptamine from neuroendocrine epithelial cells of the airway mucosa (IC50: 1.3 μM). Also serves as an adenosine receptor antagonist. Shown to inhibit ion channels in the neuromuscular junction, GH3 cells, and vascular smooth muscle cells.

中文名称: 3-异丁基-1-甲基黄嘌呤

其它名称: 1-Methyl-3-isobutylxanthine, 3-Isobutyl-1-methyl-2,6(1H,3H)-purinedione, IBMX, 3,7-Dihydro-1-methyl-3-(2-methylpropyl)-1H-purine-2,6-dione

分 子 式: C10H14N4O2

分 子 量: 222.24

CAS 编号: 28822-58-4

产品类型: Ready-to-use, DMSO solution

纯　　度: ≥99% (powder)

浓　　度: 200 mM

包装规格: 1.0 mL

储存温度: −20°C

参考文献:

1. Elks, M.L., and Manganiello, V.C., A role for soluble cAMP phosphodiesterases in differentiation of 3T3-L1adipocytes. J. Cell Physiol. 124, 191-198, (1985)
2. Fearon, I.M., et al., Inhibition of recombinant human cardiac L-type Ca2+ channel α1C subunits by 3-isobutyl-1-methylxanthine. Eur. J. Pharmacol. 342, 353-358, (1998)
3. Chen, T.C., et al., Up-regulation of the cAMP/PKA pathway inhibits proliferation, induces differentiation, and leads to apoptosis in malignant gliomas. Lab. Invest. 78, 165-174, (1998)