

Catalog # 10-1095 Dipyridamole

CAS# 58-32-2 2,6-bis(Diethanolamino)-4,8-dipiperidinopyrimido[5,4-d]pyrimidine NSC 515776 Lot # X101673

Phosphodiesterase inhibitor (IC₅₀=0.37, 0.38, 0.45, 0.9 and 4.5 μ M for PDE11, 6, 10, 5 and 8 respectively.^{1,2} Potent equilibrative nucleoside transporter 1 (ENT1) inhibitor K_i=8.2 nM vs. 144.8 nM for ENT1 and ENT2 respectively.³ Antiplatelet activity.⁴

- 1) Fujishige et al. (1999), Cloning and characterization of a novel human phosphodiesterase that hydrolyzes both cAMP and cGMP (PDE10A); J. Biol. Chem., **274** 18438
- Soderling et al. (1998), Cloning and characterization of a cAMP-specific cyclic nucleotide phosphodiesterase; Proc. Natl. Acad. Sci. USA, 95 8991
- 3) Lin and Buolamwini (2007), Synthesis, flow cytometric evaluation, and identification of highly potent dipyridamole analogues as equilibrative nucleoside transporter 1 inhibitors.; J. Med. Chem., **50** 3906
- 4) Coccheri (2010), Antiplatelet drugs do we need new options? With a reappraisal of direct thromboxane inhibitors; Drugs, **70** 887

PHYSICAL DATA

 $\begin{array}{ll} \mbox{Molecular Weight:} & 504.63 \\ \mbox{Molecular Formula:} & C_{24}H_{40}N_8O_4 \\ \mbox{Purity:} & 98\% \ \mbox{by TLC} \end{array}$

NMR: (Conforms)

Solubility: Soluble in DMSO (up to 50 mg/ml) or in Ethanol (up to 5 mg/ml)

Physical Description: Yellow solid

Storage and Stability: Store as supplied desiccated at room temperature for up to 1 year from the date of purchase.

Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.