

Olomoucine

Cat. #: O-300

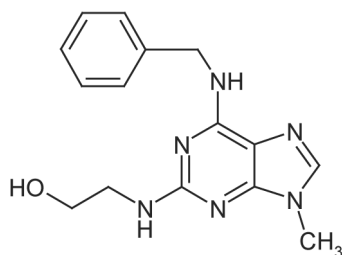
Source description: Synthetic.

M.W.: 298.35 daltons.

Purity: >99%.

Effective concentration: 20-200 μM .

Structure:



Chemical name: 6-(Benzylamino)-2-(2-hydroxyethylamino)-9-methylpurine.

Molecular formula: $\text{C}_{15}\text{H}_{18}\text{N}_6\text{O}$.

CAS No.: 101622-51-9.

Activity: Olomoucine selectively inhibits cdc2/cyclin B ($\text{IC}_{50} = 7 \mu\text{M}$), cdk2/cyclin A ($\text{IC}_{50} = 7 \mu\text{M}$), cdk2/cyclin E ($\text{IC}_{50} = 7 \mu\text{M}$), cdk/p35 kinase ($\text{IC}_{50} = 3 \mu\text{M}$) and ERK1/MAP kinase at higher concentrations ($\text{IC}_{50} = 25 \mu\text{M}$)¹. It also prevents NGF-mediated survival of neuronal cells².

References:

- Veseley, J. *et al.* (1994) *Eur. J. Biochem.* **224**, 771.
- Monaco, E.A. *et al.* (2004) *Biochem. Pharmacol.* **67**, 1947.

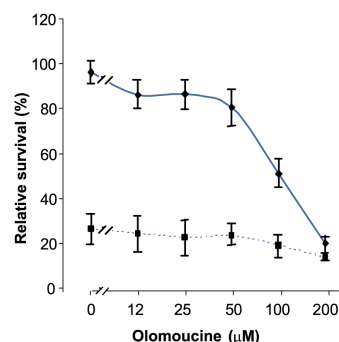
Sizes: 1 mg, 5 x 1 mg, 5 mg or 10 x 0.1 mg lyophilized powder.

Storage before reconstitution: Lyophilized powder can be stored intact at room temperature for several weeks. For longer periods, it should be stored at -20°C .

Reconstitution: DMSO. Centrifuge all product preparations before use (10000 x g 5 min).

Storage and stability after reconstitution: Up to two weeks at 4°C or six months at -20°C .

Bioassay: Olomoucine prevents NGF-mediated survival of PC-12 cells.



Cells were grown in the absence of serum. The cells were not protected (dotted line) or protected (continuous line) from apoptosis with 100 ng/ml **mNGF 2.5S (Grade I)** (#N-240) and treated with different concentrations of **Olomoucine** (#O-300). Cell survival was measured after 4 days using the XTT method, calculated as a relative percentage of the control without Olomoucine and plotted against Olomoucine concentrations.

For research purposes only, not for human use.
Last Update: May, 2010.