
Product Data Sheet

Product Name: 10074-A4

Cat. No.: GC63576

Chemical Properties

Cas. No. 312631-87-1

Formula $C_{18}H_{14}Cl_2N_2O_3S$

M.Wt

409.29

Solubility

Storage

Store at -20°C

General tips

For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

10074-A4 is a c-Myc inhibitor. 10074-A4 could bind to c-Myc370-409 at different sites along the peptide chain. 10074-A4 has anticancer effects[1][2].

10074-A4 shows inhibitory activity of HL-60 cells with an IC₅₀ of 15.1 μM[1]. 10074-A4 (25-50 μM; 24 hours) arrests the cell cycle at the S-phase in a dose-dependent manner in HL-60 cells. 10074-A4 inhibits the mRNA level of the c-Myc target genes, CCND2 and CDK4[1]. 10074-A4 could bind to c-Myc370-409 at different sites along the peptide chain and its binding behavior could be described as a 'ligand cloud'. Even in the bound state, the structure of the c-Myc370-409 peptide remained a dynamic ensemble. The 10074-A4 ligand bound at different sites throughout the c-Myc370-409 chain with different strength[2].

[1]. Chen Yu, et al. Structure-based Inhibitor Design for the Intrinsically Disordered Protein c-Myc. *Sci Rep.* 2016 Mar 2;6:22298.

[2]. Fan Jin, et al. Ligand clouds around protein clouds: a scenario of ligand binding with intrinsically disordered proteins. *PLoS Comput Biol.* 2013;9(10):e1003249.

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

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