

Product Specification Sheet

Product Name: IC-87114

Catalog Number: C4287

Technical information:

Chemical Formula: $C_{22}H_{19}N_7O$

CAS #: 371242-69-2

Molecular Weight: 397.43

Purity: > 98%

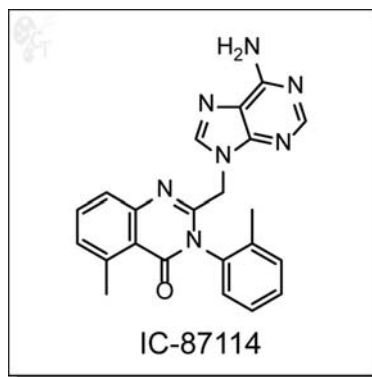
Appearance: White solid

Solubility: Soluble in DMSO up to 10 mM

Chemical Name: 2-((6-amino-9H-purin-9-yl)methyl)-5-methyl-3-o-tolylquinazolin-4(3H)-one

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.252mL of DMSO for each mg of IC-87114
 - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

Biological Activity: IC-87114 is an ATP-competitive, purine-quinazoline-based inhibitor of PI3Kdelta with an IC50 of 0.5 uM. It is selective over other major isoforms of PI3K (PI3Ka = >100 uM; PI3Kb = 75 uM; PI3Kg = 29 uM) as well as a PIK-related kinases such as DNA-PK and mTOR. [1]
Studies with IC-87114 have assisted in showing that PI3Kdelta is responsible for fMLP-induced PIP3 generation in neutrophils and critical to chemotaxis, but not adhesion. Furthermore, inhibition of PI3Kdelta affects cell polarization and CD18 integrin-dependent chemotactic migration, but is less implicated in random movement. [1]

Reference: 1. Sadhu et al, Essential role of phosphoinositide 3-kinase delta in neutrophil directional movement. J. Immunol. 2003, 170, 2647-2654. Pubmed ID: 12594293

To reorder: <http://www.cellagentech.com/IC-87114/>

For Technical Support: technical@cellagentech.com

Chemicals are sold for research use only, not for clinical or diagnostic use.