



Product Specification Sheet

Product Name: KHS101

Catalog Number: C5471-5 (powder)
C5471-5s (10mM in DMSO)

Package Size: 5 mg

Technical information:

Chemical Formula: $C_{18}H_{21}N_5S$

CAS #: 1262770-73-9

Molecular Weight: 339.46

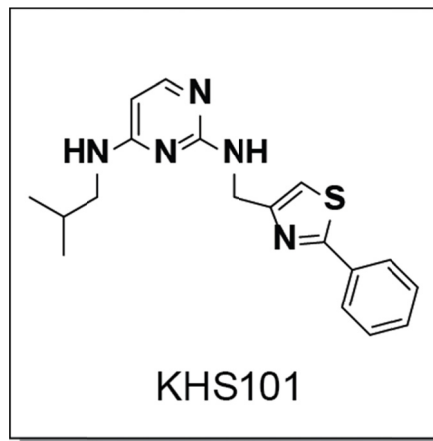
Purity: >98%

Formulation: white solid

Solubility: Soluble in DMSO up to 100 mM

Chemical Name: N⁴-isobutyl-N²-((2-phenylthiazol-4-yl)methyl)pyrimidine-2,4-diamine

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



- Handling:**
- For C5471-5 (powder), add 1.47mL of DMSO to make 10 mM solution.
 - For C5471-5s, before open the vial, centrifuge the vial at 500rpm x 1 min in a 50 mL conical tube to ensure full recovery of sample.

Biological Activity: KHS101 binds to TACC3, which is a structural component of the centrosome and mitotic spindle apparatus, prevents its ability to sequester ARNT2 in the cytoplasm. A study performed in rats showed KHS101 is a small molecule that can induce neural differentiation by inhibiting NPC maintenance, while also stabilizing proneurogenesis transcriptional pathways. KHS101 can accelerate neural differentiation from the progenitor pool by blocking self-renewal.

- Reference:**
1. Wurdak, S. Zhu, K.H. Min, L. Aimone, L.L. Lairson, J. Watson, G. Chopiuk, J. Demas, B. Charette and R. Halder et al., A small molecule accelerates neuronal differentiation in the adult rat, Proc. Natl. Acad. Sci. USA 107 (2010), pp. 16542–16547.

For Technical Support: technical@cellagentech.com

For research use only, not for clinical or diagnostic use.