

Kenpaullone

Catalog Number :1422097

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: 1-azakenpaullone, NSC-664704

Chemical Name: 9-bromo-7,12-dihydro-5H-indolo[3,2-d][1]benzazepin-6-one

Molecular Formula: C₁₆H₁₁BrN₂O

Molecular Weight: 327.2

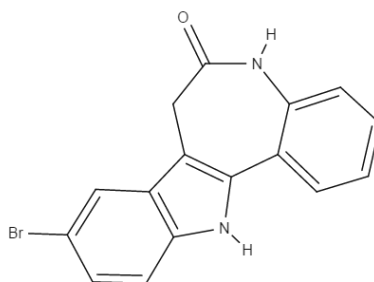
CAS Number: 142273-20-9

Purity: ≥98%

Applications: FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.



Description

Kenpaullone is a potent ATP-competitive inhibitor of glycogen synthase kinase 3Beta and CDK1/Cyclin B. It also inhibits CDk2/Cyclin A, CDk5/p25, and CDk2/Cyclin E. Kenpaullone is reported to enhance the chemical reprogramming of induced pluripotent stem cells from somatic cells.

Preparation & Storage

Soluble in organic solvents such as DMF or DMSO. DMSO up to 30mM.

References

1. Brault, L., Migianu, E., Néguesque, A., Battaglia, E., Bagrel, D., Kirsch, G. (2005). New thiophene analogues of kenpaullone: synthesis and biological evaluation in breast cancer cells.; *European journal of medicinal chemistry*, 40(8), 757-763.
2. Phiel, C. J., Wilson, C. A., Lee, V. M. Y., Klein, P. S. (2003). GSK-3α regulates production of Alzheimer's disease amyloid-β peptides.; *Nature*, 423(6938), 435-439.
3. Schultz, C., Link, A., Leost, M., Zaharevitz, D. W., Gussio, R., Sausville, E. A., ... Kunick, C. (1999). Paullones, a series of cyclin-dependent kinase inhibitors: synthesis, evaluation of CDK1/cyclin B inhibition, and in vitro antitumor activity.; *Journal of medicinal chemistry*, 42(15), 2909-2919.