

PD 0325901

Catalog Number :3911091

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

Product Information

Synonyms: PD-0325901, ZINC03938683, NCGC00189075-01,(R)-N-(2,3-Dihydroxypropoxy)-3,4-difluoro-2-((2-fluoro-4-iodophenyl)amino)benzamide

Chemical Name: N-[(2R)-2,3-dihydroxypropoxy]-3,4-difluoro-2-((2-fluoro-4-iodoanilino)benzamide

Molecular Formula: C₁₆H₁₄F₃IN₂O₄

Molecular Weight: 482.2

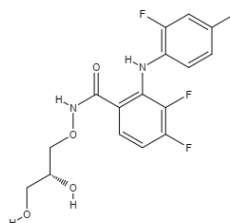
CAS Number: 391210-10-9

Purity: ≥98%

Applications: FA

Formulation: Crystalline solid

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



Description

PD 0325901 is a potent and selective MEK1 and MEK2 inhibitor. It is reported to inhibit cell proliferation and arrest cell cycle at the G0/G1 phase of thyroid cancer cells. PD 0325901 can be used with CHIR99021 to reprogram somatic cells into iPS cells and promote cell self-renewal. Studies have shown that in comparison to the CI-1040 MEK inhibitor that PD 0325901 has a greater potency of inhibition, longer duration, greater solubility, improved bioavailability, and increased metabolic stability.

Preparation & Storage

Soluble in organic solvents such as ethanol and DMSO. DMSO up to 25 mM.

References

1. Sebolt-Leopold, J. S., Merriman, R., Omer, C., Tecle, H., Bridges, A., Klohs, W., ... Leopold, W. R. (2004). The biological profile of PD 0325901: A second generation analog of CI-1040 with improved pharmaceutical potential.; *Cancer Research*,;64(7 Supplement), 925-925.
2. Haura, E. B., Ricart, A. D., Larson, T. G., Stella, P. J., Bazhenova, L., Miller, V. A., ... Gadgeel, S. M. (2010). A phase II study of PD-0325901, an oral MEK inhibitor, in previously treated patients with advanced non-small cell lung cancer.; *Clinical Cancer Research*,;16(8), 2450-2457.
3. Leyton, J., Smith, G., Lees, M., Perumal, M., Aigbirhio, F. I., Golovko, O., ... Aboagye, E. O. (2008). Noninvasive imaging of cell proliferation following mitogenic extracellular kinase inhibition by PD0325901.; *Molecular cancer therapeutics*,;7(9), 3112-3121.