Product Data Sheet

Chemical Properties

Product Name: LY364947
Cas No.: 396129-53-6
M.Wt: 272.3
Formula: C17H12N4

Chemical Name: 4-(5-pyridin-2-yl-1H-pyrazol-4-yl)quinoline
Canonical SMILES: C1=CC=C2C(=C1)C(=CC=N2)C3=C(NN=C3)C4=CC=CC=N4
Solubility: Limited 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.
Shopping Condition: Evaluation sample solution: ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets: SMAD
Pathways: TGF-β / Smad Signaling >> SMAD
Description:
The multifunctional cytokine transforming growth factor-β (TGF-β) is a member of a large family of growth factors involved in the regulation of a diverse array of biological processes including cell growth and differentiation, matrix modulation, and embryonic development. LY364947 is a
inhibitor of the transforming growth factor-β type I receptor kinase domain.
In vitro: LY364947 was quickly identified as a potent inhibitor (IC50= 51 nM) and was chosen as a platform for SAR development. Compounds were further evaluated as inhibitors of TGF-β-dependent luciferase production in mink lung cells (p3TP Lux) and growth in mouse fibroblasts (NIH 3T3) [1].
In vivo: In a rat model of NMDA-induced retinal degeneration, simultaneous injection of NMDA and the TGF-β inhibitor LY364947 slightly but significantly attenuated the reduction in number of cells in the ganglion cell layer and almost completely prevented the enhancement of capillary degeneration. [3].
Clinical trial: Up to now, LY364947 is still in the preclinical development stage.

Reference:

Caution

FOR RESEARCH PURPOSES ONLY.
NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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