
Product Data Sheet

Product Name: KIRA-7
Cat. No.: GC64238

Chemical Properties

Cas. No. 1937235-76-1

Formula C₂₇H₂₃FN₆O M.Wt 466.51

Solubility DMSO : 100 mg/mL (214.36 mM; Need ultrasonic) 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.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

KIRA-7, an imidazopyrazine compound, binds the IRE1 α kinase (IC₅₀ of 110 nM) to allosterically inhibit its RNase activity. KIRA-7 has an anti-fibrotic effect[1].

KIRA-7 can inhibit XBP1 splicing in the alveolar epithelial cell line MLE12[1].

KIRA-7 (5 mg/kg; intraperitoneal injection; daily for 14 days; C57BL6 mice) treatment results in decreased spliced XBP1 and ATF4, compared to bleomycin exposed mice treated with vehicle. Likewise, mRNA levels of BiP and CHOP are significantly elevated after Bleomycin exposure, and treatment of Bleomycin-exposed mice with KIRA-7 decreased these levels. mRNA levels of collagen 1A1 and fibronectin are both significantly decreased by KIRA-7 treatment[1].

[1]. Thamsen M, et al. Small molecule inhibition of IRE1 α kinase/RNase has anti-fibrotic effects in the lung. PLoS One. 2019 Jan 9;14(1):e0209824.

Caution: Product has not been fully validated for medical applications. For research use only.

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