

Product Data Sheet

Product Name: KOTX1
Cat. No.: GC91929

Chemical Properties

Cas. No. 1788963-83-6

Chemical Name 3-ethyl-N-(7-fluoro-1,2,3,4-tetrahydro-2-oxo-6-quinoliny)-4-pyridinecarboxamide

SMILES FC1=C(C=C2C(NC(CC2)=O)=C1)NC(C3=C(CC)C=NC=C3)=O

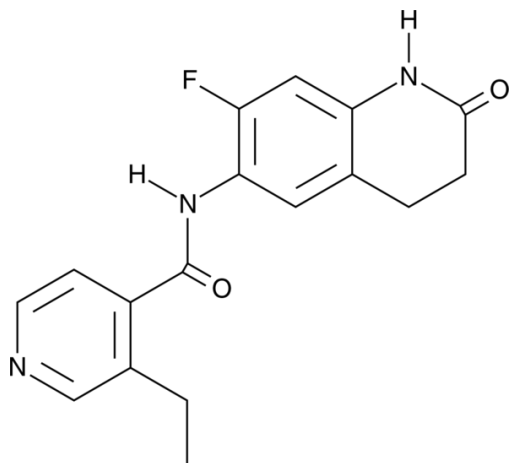
Formula $C_{17}H_{16}FN_3O_2$ M.Wt 313.3

Solubility Acetonitrile: Slightly Soluble: 0.1-1 mg/ml, Water: Slightly Soluble: 0.1-1 mg/ml
Storage 4°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

KOTX1 is an inhibitor of aldehyde dehydrogenase 1A3 (ALDH1A3; $IC_{50} = 5.14 \text{ nM}$).¹ It potentiates glucose-induced insulin secretion from pancreatic islets isolated from patients with type 2 diabetes when used at a concentration of 10 μM . KOTX1 (40 mg/kg per day) decreases plasma insulin levels

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

and reduces blood glucose levels in an intraperitoneal glucose tolerance test (IPGTT) in diabetic *db/db* male mice. It decreases blood glucose levels and increases plasma insulin levels in a mouse model of obesity induced by a high-fat diet when administered in the diet at 270 ppm.

References:

[1]. Son, J., Du, W., Esposito, M., et al. Genetic and pharmacologic inhibition of ALDH1A3 as a treatment of β -cell failure Nat. Commun. 14(1)558(2023).

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA