

Product Data Sheet

Product Name: PKM2-IN-3

Cat. No.: GC70831

Chemical Properties

Cas. No. 2408841-19-8

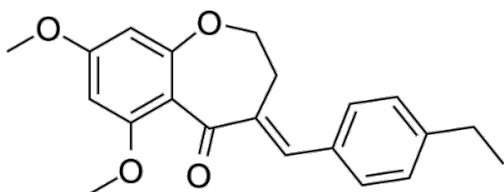
Formula $C_{21}H_{22}O_4$ M.Wt 338.4

Solubility DMSO : 200 mg/mL (591.02 mM); Storage -20°C
Need ultrasonic; Hygroscopic DMSO has a significant impact on the solubility of product, please use newly opened DMSO)

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

PKM2-IN-3 is an inhibitor of PKM2 kinase with an IC₅₀ value of 4.1 μM. PKM2-IN-3 exhibits an anti-neuroinflammatory effect by inhibiting PKM2-mediated glycolysis and NLRP3 activation.

PKM2-IN-3 (compound 10i) inhibits the TNF-α release of LPS-stimulated RAW264.7 macrophages,

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

with an IC₅₀ value of 5.2 μM. PKM2-IN-3 exhibits the lowest toxicity with a CC₅₀ value of 43.6 μM^[1]. PKM2-IN-3 (0.1-100 μM; 20 min) inhibits PKM2 kinase activity in a cell-free molecular level with an IC₅₀ value of 4.1 μM^[1].

PKM2-IN-3 (1, 10 mg/kg; i.p.; daily for 3 days) significantly reverses the LPS-induced mice behavior changes in open field test^[1].

PKM2-IN-3 (1, 10 mg/kg; i.v.; injected at 4 hours and 24 hours after ischemia onset) reduces the infarct volume and improves neurological deficits of tMCAO rats^[1].

References:

[1]. Gao CL, et al. Synthesis and Target Identification of Benzoxepane Derivatives as Potential Anti-Neuroinflammatory Agents for Ischemic Stroke. Angew Chem Int Ed Engl. 2020;59(6):2429-2439.

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