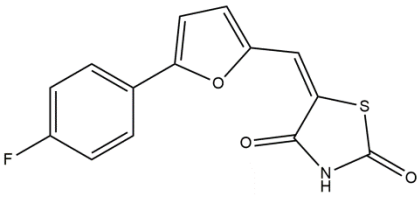
CAY10505

ALTERNATE NAMES: (5E)-5-{[5-(4-fluorophenyl)furan-2-yl]methylidene}-1,3-thiazolidine-2,4-dione; 5-[[5-(4-fluorophenyl)-2-furanyl]methylene]-2,4-thiazolidinedione

CATALOG #:
B2962-5 5 mg
B2962-25 25 mg

STRUCTURE:



MOLECULAR FORMULA: $C_{14}H_8FNO_3S$

MOLECULAR WEIGHT: 289.28

CAS NUMBER: 1218777-13-9, 328960-84-5

APPEARANCE: Solid

PURITY: 99.8%

SOLUBILITY: ~20 mg/ml in DMSO and DMF

DESCRIPTION: CAY10505 is a potent inhibitor of phosphoinositide 3-kinase (PI3K), selectively inhibiting the γ isoform with an IC_{50} of 30 nM. It inhibits the α, β, and δ isoforms of PI3K with IC_{50} values of 0.94, 20, and 20 μM, respectively. It significantly inhibits the unrelated casein kinase 2 (CK2) with an IC_{50} of 20 nM. It also inhibits the phosphorylation of the PI3K substrate PKB/Akt in mouse macrophages with an IC_{50} of 228 nM. It improves hypertension-associated vascular endothelial dysfunction in rats.

STORAGE TEMPERATURE: -20ºC

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Pomel, V., Klicic, J., Covini, D., et al. Furan-2-ylmethylene thiazolidinediones as novel, potent, and selective inhibitors of phosphoinositide 3-kinase γ. Journal of Medicinal Chemistry 49, 3857-3871 (2006).
2. Tyagi, S., Sharma, S., Budhiraja, R.D. Effect of phosphatidylinositol 3-kinase-γ inhibitor CAY10505 in hypertension, and its associated vascular endothelium dysfunction in rats. Can J Physiol Pharmacol. 90(7):881-5 (2012).

RELATED PRODUCTS:

IPI-145 (Cat. No. 2445)
PI3-Kγ Inhibitor, AS-605240 (Cat. No. 1780)
TGX-221 (Cat. No. 1781)
EZSolution™ LY294002 (Cat. No. 1747)
DiscoveryPak™ PI 3-Kinase Inhibitor Set (Cat. No. K856)

DISCLAIMER: ***FOR RESEARCH USE ONLY! Not to be used on humans.***