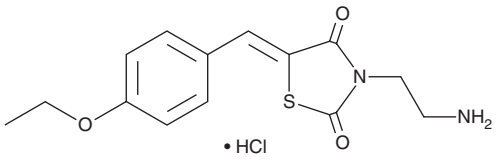
PRODUCT INFORMATION

ERK Inhibitor

Item No. 15944

CAS Registry No.: 1049738-54-6
Formal Name: 3-(2-aminoethyl)-5-[(4-ethoxyphenyl) methylene]-2,4-thiazolidinedione, monohydrochloride
Synonym: Extracellular Regulated Kinase Inhibitor
MF: $C_{14}H_{16}N_2O_3S \bullet HCl$
FW: 328.8
Purity: ≥95%
UV/Vis.: λ_{max}: 238, 354 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ERK inhibitor is supplied as a crystalline solid. A stock solution may be made by dissolving the ERK inhibitor in the solvent of choice, which should be purged with an inert gas. ERK inhibitor is soluble in the organic solvent DMSO at a concentration of approximately 2 mg/ml.

Description

ERK inhibitor is a cell-permeable inhibitor that binds ERK2 near its docking domain (K_D = 5 µM).[1] This prevents its interaction with protein substrates without inhibiting catalytic activity.[1] ERK inhibitor blocks ERK-specific phosphorylation of ribosomal S6 kinase-1 and ternary complex factor Elk-1 but does not affect ERK1/2 phosphorylation by MEK1/2.[1] Presumably through its effects on ERK, ERK inhibitor completely prevents proliferation of HeLa cells (IC_{50} = 15-20 µM), A549 lung carcinoma cells (IC_{50} = 25 µM), Sum-159 estrogen receptor-negative breast cancer cells and HT1080 fibrosarcoma cells.[1]

Reference

1. Hancock, C.N., Macias, A., Lee, E.K., *et al.* Identification of novel extracellular signal-regulated kinase docking domain inhibitors. *J. Med. Chem.* **48(14)**, 4586-4595 (2005).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM