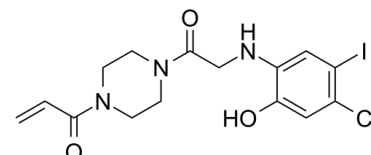


Data Sheet

Product Name:	K-Ras(G12C) inhibitor 12
Cat. No.:	CS-5104
CAS No.:	1469337-95-8
Molecular Formula:	C ₁₅ H ₁₇ ClIN ₃ O ₃
Molecular Weight:	449.67
Target:	Apoptosis; Ras
Pathway:	Apoptosis; GPCR/G Protein
Solubility:	DMSO : 16.67 mg/mL (37.07 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

K-Ras(G12C) inhibitor 12 is a K-Ras(G12C) inhibitor, the half-maximum effective concentration (EC₅₀) for K-Ras(G12C) inhibitor 12 in H1792 cells is 0.32 μM. IC₅₀ value: 0.32 μM (EC₅₀) Target: K-Ras Binding of K-Ras(G12C) inhibitor 12 to K-Ras(G12C) disrupts both switch-I and switch-II, subverting the native nucleotide preference to favour GDP over GTP and impairing binding to Raf. In the absence of K-Ras(G12C) inhibitor 12, K-Ras(G12C) shows a slight preference for GTP (relative affinity 0.6).

PROTOCOL (Extracted from published papers and Only for reference)

Cell assay [1] H23, H358, H1299, H1437, H1792, Calu-1 and A549 are cultured in DMEM with 10% FBS. Cells are plated in 96-well plates at 2,000 cells per well in 90 μl DMEM with 10% FBS and allowed to attach for 24 h. Cells were treated by the addition of 10 μl 100 μM K-Ras(G12C) inhibitor 12 or vehicle (0.1% DMSO final). After 72 h, media is exchanged and plates are analysed using CellTiter-Glo Luminescent Cell Viability Assay.

References:

[1]. Ostrem JM, et al. K-Ras(G12C) inhibitors allosterically control GTP affinity and effector interactions. Nature. 2013 Nov 28;503(7477):548-551.

CAIndexNames:

2-Propen-1-one, 1-[4-[2-[(4-chloro-2-hydroxy-5-iodophenyl)amino]acetyl]-1-piperazinyl]-

SMILES:

C=CC(N1CCN(C(CNC2=CC(I)=C(Cl)C=C2O)=O)CC1)=O

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

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA