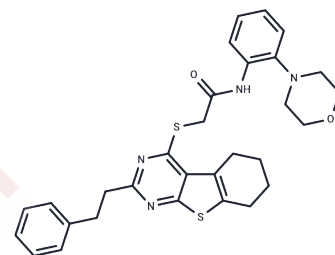


## iHCK-37

## Chemical Properties

CAS No. :	516478-09-4
Formula:	C30H32N4O2S2
Molecular Weight:	544.73
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	iHCK-37 (ASN05260065) is a selective Hck inhibitor with antitumor activity, blocking HIV-1 viral replication. iHCK-37 reduces PI3K/AKT and MAPK/ERK pathway activation after erythropoietin induction in high Hck-expressing cells, useful in chronic myelogenous leukemia (CML) research.
Targets(IC50)	Hck,Src
In vitro	<p>Methods: AML cell lines (HL60, KG1a and U937) and chronic myeloid leukemia cell lines (HEL and K562) were treated with iHCK-37 (5.0-20 <math>\mu</math>M, 24 hours) and cell viability was detected.</p> <p>Results: iHCK-37 showed effective antiproliferative activity in vitro, with growth inhibition (GI50) of 5.0-5.8 <math>\mu</math>M for AML cell lines (HL60, KG1a and U937) and 9.1-19.2 <math>\mu</math>M for chronic myeloid leukemia cell lines (HEL and K562). [2]</p> <p>Methods: Lentivirus HCK-silenced K562 and U937 cell lines and KG1a (AML/CD34+) cell lines were treated with iHCK-37 (3-9 <math>\mu</math>M) and protein level changes were detected by WB.</p> <p>Results: iHCK-37 led to decreased phosphorylation of ERK, AKT, and P70S6K in lentiviral HCK-silenced K562 and U937 cell lines; and decreased p-HCK, p-ERK, p-AKT, and p-70S6 in the KG1a (AML/CD34+) cell line in a concentration-dependent manner. [2]</p>

## Solubility Information

Solubility	DMSO: 200 mg/mL (367.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

### Preparing Stock Solutions

---

	1mg	5mg	10mg
1 mM	1.8358 mL	9.1789 mL	18.3577 mL
5 mM	0.3672 mL	1.8358 mL	3.6715 mL
10 mM	0.1836 mL	0.9179 mL	1.8358 mL
50 mM	0.0367 mL	0.1836 mL	0.3672 mL

---

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Cristina Tintori, et al. Identification of Hck inhibitors as hits for the development of antileukemia and anti-HIV agents. *ChemMedChem*. 2013 Aug;8(8):1353-60.

Fernanda Marconi Roversi, et al. Hematopoietic cell kinase (HCK) is a potential therapeutic target for dysplastic and leukemic cells due to integration of erythropoietin/PI3K pathway and regulation of erythropoiesis: HCK in erythropoietin/PI3K pathway. *Biochim Biophys Acta Mol Basis Dis*. 2017 Feb;1863(2):450-461.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481