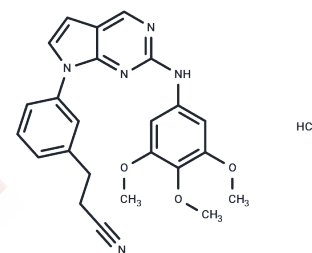


Casein Kinase II Inhibitor IV Hydrochloride

Chemical Properties

CAS No. :	2320347-54-2
Formula:	C ₂₄ H ₂₄ ClN ₅ O ₃
Molecular Weight:	465.93
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	Casein Kinase II Inhibitor IV Hydrochloride is a small-molecule inducer of epidermal keratinocyte differentiation, offering novel therapeutic approaches for treating skin hyperproliferative disorders.
Targets(IC50)	Others,Casein Kinase
In vitro	Treatment with Casein Kinase II Inhibitor IV enhances early differentiation in human epidermal keratinocytes (NHEKs), evidenced by increased keratins 1 and 10 expression at 48 hours. Levels of IVL and TGM also rise at 72 hours and remain elevated at 96 hours. Furthermore, this treatment induces expression of loricrin, a marker of terminal differentiation, at later stages. mRNA expression analysis corroborates these findings, showing early upregulation of keratinocyte differentiation marker genes keratin 1 (5.4-fold) and keratin 10 (5.4-fold) at 12 and 24 hours, while genes marking terminal differentiation, including IVL (1.8-fold), TGM 1 (4.8-fold), loricrin (3.3-fold), and filaggrin (5.6-fold), are significantly increased at 36 and 48 hours. These consistent results underscore Casein Kinase II Inhibitor IV's capacity to drive the differentiation of epidermal progenitor cells into terminally differentiated keratinocytes [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1462 mL	10.7312 mL	21.4625 mL
5 mM	0.4292 mL	2.1462 mL	4.2925 mL
10 mM	0.2146 mL	1.0731 mL	2.1462 mL
50 mM	0.0429 mL	0.2146 mL	0.4292 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

Hong J, et al. Identification and characterization of small-molecule inducers of epidermal keratinocyte differentiation. ACS Chem Biol. 2007 Mar 20;2(3):171-5.

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