Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Casein Kinase II Inhibitor IV Hydrochloride

Catalog No: tcsc0042436

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Specifications

Formula:
$C_{24}H_{24}ClN_5O_3$

Pathway:
Stem Cell/Wnt;Cell Cycle/DNA Damage

Target:
Casein Kinase;Casein Kinase

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
465.93

Product Description

Casein Kinase II Inhibitor IV Hydrochloride is a small-molecule inducer of epidermal keratinocyte differentiation.

IC50 & Target: Target: Casein Kinase[1]

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

In Vitro: Treatment of human epidermal keratinocytes (NHEKs) with Casein Kinase II Inhibitor IV leads to an increase in the early differentiation markers keratins 1 and 10 at 48 h. Increased levels of IVL and TGM are observed in cells treated with Casein Kinase II Inhibitor IV at 72 h and persisted at 96 h. In addition, treated with Casein Kinase II Inhibitor IV expresses loricrin, a terminal differentiation marker, at later time points. Similar results are observed by messenger RNA (mRNA) expression analysis of NHEKs treated with Casein Kinase II Inhibitor IV. At early time points (12 and 24 h), treatment with Casein Kinase II Inhibitor IV leads to the upregulation of keratinocyte early differentiation marker genes, including keratin 1 (5.4-fold) and keratin 10 (5.4-fold). Terminal differentiation marker genes, including IVL (1.8-fold), TGM 1 (4.8-fold), loricrin (3.3-fold), and filaggrin (5.6-fold), are upregulated at late time points (36 and 48 h). These results are consistent with the ability of Casein Kinase II Inhibitor IV to induce differentiation of epidermal progenitor cells into terminally differentiated keratinocytes[1].