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

Dencichin

Catalog No: tcsc0016985

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Specifications

CAS No:
5302-45-4

Formula:
$C_5H_8N_2O_5$

Pathway:
Metabolic Enzyme/Protease

Target:
HIF/HIF Prolyl-Hydroxylase

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
Dencichine;L-Dencichin;ODAP

Observed Molecular Weight:
176.13

Product Description

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Dencichin is a non-protein amino acid originally extracted from *Panax notoginseng*, and can inhibit **HIF-prolyl hydroxylase-2 (PHD-2)** activity.

IC50 & Target: PHD-2[1]

In Vitro: Dencichin (β-ODAP, 10 μM, 50 μM, 100 μM and 200 μM) increases HRE expression by 1.3±0.09, 2.5±0.07, 4.2±0.15 and 1.3±0.07 fold respectively compared to control. Dencichin has intermolecular interactions with PHD-2[1]. Dencichin (10 μM, 100 μM, 1 mM) significantly inhibits cell proliferation and extracellular matrix (ECM) proteins accumulation of HBZY-1 cells, and reduces the secretion of collagen I (Col I), collagen IV (Col IV), and fibronectin (FN)[2].

In Vivo: Dencichin improves metabolism disorder in diabetic nephropathy (DN) secondary to type II diabetes mellitus (DM) model. Dencichin (80, 160 mg/kg/day, p.o.) significantly prevents the up-regulation of TCH, TG, LDL, and HbAlc and the down-regulation of HDL in DN rats induced by STZ injection. Dencichin also attenuates renal injury induced in the DN secondary to type II DM model. Dencichin alleviates pancreas damage in the STZ-induced DN model. Dencichin regulates protein expression in the TGF-β/Smad signalling pathway in STZ-induced DN models[2].