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

Nicotinamide

Catalog No: tcsc1968

Available Sizes

Size: 1g

Size: 5g

Specifications

CAS No:
98-92-0

Formula:
$C_6H_6N_2O$

Pathway:
Epigenetics;Cell Cycle/DNA Damage;Metabolic Enzyme/Protease

Target:
Sirtuin;Sirtuin;Endogenous Metabolite

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (818.87 mM); H2O : ≥ 50 mg/mL (409.43 mM)

Alternative Names:
Niacinamide;Nicotinic acid amide;Vitamin B3

Observed Molecular Weight:
122.12

Product Description

Nicotinamide is a form of vitamin B3 that plays essential roles in cell physiology through facilitating NAD+ redox homeostasis and providing NAD+ as a substrate to a class of enzymes that catalyze non-redox reactions. Nicotinamide is an inhibitor of **SIRT1**.

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

IC50 & Target: SIRT1

In Vitro: Pretreatment with the poly (ADP-ribose) polymerase (PARP) inhibitor nicotinamide is able to prevent HCN2 cell death. When nicotinamide is added prior to t-BuOOH, it is able to prevent neuronal cell death and inhibit apoptosis. Nicotinamide-pretreated neurons have higher expression levels of inhibitors of apoptosis (IAP) genes[1]. Nicotinamide inhibits vasoconstriction by ET. Nicotinamide also alleviates oxidative stress, which exacerbates PE and FGR[3].

In Vivo: Normal and streptozotocin-nicotinamide induced adult male diabetic rats receive quercetin (10, 25 and 50 mg/kg/bw) orally, and cause significant decrease in FBG and cardiac injury marker levels with increased in insulin levels[2]. Nicotinamide improves maternal hypertension, proteinuria, and glomerular endotheliosis in RUPP mice. Moreover, nicotinamide prolongs pregnancies, and improves survival and growth of the embryos in RUPP PE mice[3].