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

Bucladesine (sodium salt)

Catalog No: tcsc2967

Available Sizes

Size: 50mg

Size: 100mg

Specifications

CAS No:
16980-89-5

Formula:
$C_{18}H_{23}N_5NaO_8P$

Pathway:
Stem Cell/Wnt;Protein Tyrosine Kinase/RTK

Target:
PKA;PKA

Purity / Grade:
>98%

Solubility:
H2O : ≥ 42 mg/mL (85.48 mM)

Alternative Names:
Dibutyryl-cAMP sodium salt;DC2797;Sodium dibutyryl cAMP

Observed Molecular Weight:
491.37

Product Description

Bucladesine is a membrane permeable selective activator of PKA.

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Target: PKA

Bucladesine (bilateral infusion of 10 mM or 100 mM) leads to a significant reduction in escape latency and travel distance (showing an improvement in spatial memory) compared to the control, as assesed by Morris water maze task in male rats. Bucladesine at 1 mM and 5 mM concentrations infused within minutes after 0.5 mg nicotine infusion improves spatial memory retention in male rats [1]. Bucladesine (10 mM/side) combined with Nicotine (0.5 mM/side) results in a significant increase in the ChAT and VAChT immunoreactivity in CA1 regions, and increase in the optical density and amount of ChAT and VAChT immunostaining correlates with the decrease in escape latency and traveled distance in rats treated with Nicotine and low dose of Bucladesine [2]. Bucladesine is absorbed very rapidly and almost completely when the aqueous solution is applied to the site where the skin has been excised. Bucladesine is absorbed rapidly but slower than in the full-thickness abrasion rat model in the case of stripped skin [3]. Bucladesine (single or multiple administration of an emulsion containing 1.5%) is capable of significantly reducing the inflammatory oedema in the arachidonic acid induced ear oedema model in mice [4].