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

Minoxidil

Catalog No: tcsc1867

Available Sizes

Size: 1g

Size: 5g

Specifications

CAS No:
38304-91-5

Formula:
$C_9H_{15}N_5O$

Pathway:
Membrane Transporter/Ion Channel

Target:
Potassium Channel

Purity / Grade:
>98%

Solubility:
DMSO : 4.6 mg/mL (21.98 mM; Need ultrasonic and warming)

Alternative Names:
U10858

Observed Molecular Weight:
209.25

Product Description

Minoxidil(U 10858) is an antihypertensive vasodilator medication.

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Target: potassium channel

Minoxidil, a potent antihypertensive agent, induces generalized hypertrichosis when administered systemically, or localized hair regrowth when applied topically to sites of severe alopecia areata. The pharmacologic mechanisms by which minoxidil stimulates hair growth are unknown. This study was designed to examine whether minoxidil has direct effects on neonatal murine epidermal cells in culture. In the presence of minoxidil, cultures showed a marked dose-dependent second peak of DNA synthesis 8-10 days after culture initiation. In addition, two morphologically distinct cell types appeared. Indirect immunofluorescence staining with keratin-specific antibody revealed cytoplasmic keratin fibers, suggesting the epidermal origin of these cells. Our experiments demonstrate that minoxidil can affect epidermal cells in culture by altering their growth pattern and phenotypic appearance [1] . Finite doses of minoxidil (2%, w/v) in formulations containing varying amounts of ethanol, propylene glycol (PG), and water (60:20:20, 80:20:0, and 0:80:20 by volume, respectively) were used. Minoxidil in SC (by tape stripping), appendages (by cyanoacrylate casting), and receptor fluid was determined by liquid scintillation counting. At early times (30 min, 2 h), ethanol-containing formulations (60:20:20 and 80:20:0) caused significantly greater minoxidil retention in SC and appendages, compared to the formulation lacking ethanol (0:80:20). A significant increase in minoxidil receptor penetration occurred with the PG-rich 0:80:20 formulation after 12 h [2].