

Olanexidine

Chemical Properties

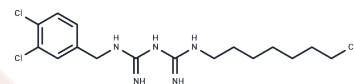
CAS No. : 146510-36-3

Formula: C₁₇H₂₇Cl₂N₅

Molecular Weight: 372.34

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Olanexidine is a broad-spectrum antibacterial agent and antiseptic, effective against both Gram-positive and Gram-negative bacteria. It is commonly utilized in the research of infection and inflammation [1] [2] [3].
Targets(IC50)	Others,Antibacterial
In vitro	Olanexidine demonstrates a broad-spectrum bactericidal effect against both Gram-positive cocci and Gram-negative bacteria at a concentration of 50 µM over 48 hours, showcasing its potent antimicrobial properties [1]. At a dosage of 50 µg/mL during a 24-hour period, it effectively suppresses chronic inflammatory responses in oral mucosal cells, indicating its potential utility in managing oral inflammation [2]. Furthermore, within a concentration range of 0-15000 µg/mL, Olanexidine, specifically in its gluconate form, impairs the attachment capabilities of virus-like particles to the human norovirus binding receptor and promotes the aggregation of these particles, suggesting a novel antiviral application [3]. In a related cell viability assay focusing on various bacterial strains, including Gram-positive cocci, Enterococcus spp., Gram-positive bacilli, and Gram-negative strains, with concentrations up to 1 mg/mL and a brief exposure of 30 seconds, Olanexidine was found to inhibit bacterial activity, achieving MIC values approximately between 6.8 and 1740 µg/mL, thereby confirming its efficacy across a broad concentration range.
In vivo	Olanexidine, when applied to the skin at concentrations of 1%, 1.5%, and 2% in saline, demonstrates fast-acting and long-lasting bactericidal effects against both transient and resident skin bacterial flora in male cynomolgus monkeys, with optimal efficacy observed at a 1.5% concentration [4].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6857 mL	13.4286 mL	26.8572 mL
5 mM	0.5371 mL	2.6857 mL	5.3714 mL
10 mM	0.2686 mL	1.3429 mL	2.6857 mL
50 mM	0.0537 mL	0.2686 mL	0.5371 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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