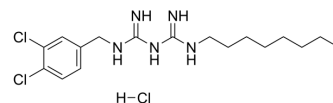


Olanexidine hydrochloride

| | |
|---------------------------|--|
| Cat. No.: | HY-125654A |
| CAS No.: | 146509-94-6 |
| Molecular Formula: | C ₁₇ H ₂₈ Cl ₃ N ₅ |
| Molecular Weight: | 408.8 |
| Target: | Bacterial |
| Pathway: | Anti-infection |
| Storage: | 4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light) |



SOLVENT & SOLUBILITY

| | | | | | | |
|---|--|----------------------|-------------|-------------|-------------|--------------|
| In Vitro | DMSO : 62.5 mg/mL (152.89 mM; ultrasonic and warming and heat to 60°C) | | | | | |
| | Preparing Stock Solutions | Solvent | Mass | 1 mg | 5 mg | 10 mg |
| | | Concentration | | | | |
| | | 1 mM | | 2.4462 mL | 12.2309 mL | 24.4618 mL |
| | | 5 mM | | 0.4892 mL | 2.4462 mL | 4.8924 mL |
| | 10 mM | | 0.2446 mL | 1.2231 mL | 2.4462 mL | |
| Please refer to the solubility information to select the appropriate solvent. | | | | | | |
| In Vivo | 1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.09 mM); Clear solution | | | | | |

BIOLOGICAL ACTIVITY

| | |
|--------------------|---|
| Description | Olanexidine hydrochloride is a monobiguanide compound with bactericidal activity. Olanexidine probably binds to the cell membrane, destroys membrane integrity. Olanexidine hydrochloride is active against a wide range of bacteria, including Gram-positive and Gram-negative bacteria. Olanexidine exhibits the bactericidal concentration of 109 µg/mL for Gram-positive bacilli ^[1] . |
| In Vitro | Olanexidine shows a bactericidal mechanism of (i) interacts with the bacterial surface molecules, such as lipopolysaccharide and lipoteichoic acid, (ii) disrupts the cell membranes of liposomes, which are artificial bacterial membrane models, (iii) enhances the membrane permeability of Escherichia coli, (iv) disrupts the membrane integrity of S. aureus, and (v) denatures proteins at relatively high concentrations (≥160 µg/ml) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

REFERENCES

Caution: Product has not been fully validated for medical applications. For research use only.

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