Product Data Sheet

Sodium lauryl sulfoacetate

Cat. No.: HY-107789 CAS No.: 1847-58-1 Molecular Formula: $C_{14}H_{27}NaO_5S$ Molecular Weight: 330.42

Target: Biochemical Assay Reagents; HSV

Pathway: Others; Anti-infection

4°C, sealed storage, away from moisture Storage:

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 15.62 mg/mL (47.27 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.0265 mL	15.1323 mL	30.2645 mL
	5 mM	0.6053 mL	3.0265 mL	6.0529 mL
	10 mM	0.3026 mL	1.5132 mL	3.0265 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.08 mg/mL (6.30 mM); Suspended solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (6.30 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (6.30 mM); Clear solution

BIOLOGICAL ACTIVITY

Description Sodium lauryl sulfoacetate is a solid anionic surfactant of plant origin. Sodium lauryl sulfoacetate is an immunoadjuvant with antiimmunosuppressive effects. Sodium lauryl sulfoacetate has antiviral activity $^{[1][2][3]}$.

In Vitro Sodium lauryl sulfoacetate (62.5, 125, 250, or 500 mug/mL, 44 h) can promote the proliferation of lymphocytes in chicken peripheral blood monocytes^[1].

Sodium lauryl sulfoacetate (10, 20, 30, 40, 50 μM, 1 h) decreases the infectivity of herpes virus to Vero cells in a

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay^[3]

concentration-dependent manner^[3].

Cell Line:	HSV-1, HSV-2	
Concentration:	12.5, 25, 37.5 μΜ	
Incubation Time:	24 h	
Result:	Decreased the infectivities for Vero cells in a concentration-dependent manner.	

In Vivo

Sodium lauryl sulfoacetate (1.0, 2.0, or 4.0 mg/kg intramuscular injection for 3 consecutive days) can promote the NDV-specific antibody response of thiomycin-treated chickens^[1].

Sodium lauryl sulfoacetate (5% SLC gel) significantly decreases the mean lesion score of herpes simplex virus type 1 (HSV-1) [3]

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REFERENCES

- [1]. Piret J,et al. Sodium lauryl sulfate, a microbicide effective against enveloped and nonenveloped viruses. Curr Drug Targets. 2002 Feb;3(1):17-30.
- [2]. Piret J, et al. Sodium lauryl sulfate increases the efficacy of a topical formulation of foscarnet against herpes simplex virus type 1 cutaneous lesions in mice. Antimicrob Agents Chemother. 2000 Sep;44(9):2263-70.
- [3]. Cheng D, et al. The immune enhancement of sodium lauryl sulfoacetate in chickens. Vet Med Int. 2010;2010:485060.

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

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