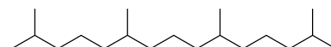


Pristane

| | | | |
|---------------------------|---------------------------------|-------|----------|
| Cat. No.: | HY-N7819 | | |
| CAS No.: | 1921-70-6 | | |
| Molecular Formula: | C ₁₉ H ₄₀ | | |
| Molecular Weight: | 268.52 | | |
| Target: | Others | | |
| Pathway: | Others | | |
| Storage: | Pure form | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 6 months |
| | | -20°C | 1 month |



SOLVENT & SOLUBILITY

| | | | | | |
|---|--|--------------------------|--------------|------------|------------|
| In Vitro | DMSO : 100 mg/mL (372.41 mM; Need ultrasonic) | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 3.7241 mL | 18.6206 mL | 37.2412 mL |
| | | 5 mM | 0.7448 mL | 3.7241 mL | 7.4482 mL |
| 10 mM | | 0.3724 mL | 1.8621 mL | 3.7241 mL | |
| Please refer to the solubility information to select the appropriate solvent. | | | | | |
| In Vivo | <ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (9.31 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (9.31 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (9.31 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|--------------------|---|
| Description | Pristane (Norphytane) is a naturally occurring hydrocarbon oil found in small quantities in many plants, in various marine organisms, and as the most active component of mineral oil ^[1] . Pristane is a non-antigenic adjuvant, and induces MHC class II-restricted, arthritogenic T cells in the rat ^[2] . |
| In Vitro | Pristane activates CD4 ⁺ αβT cells that are MHC class II restricted and arthritogenic ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

In Vivo

Pristane activates CD4⁺ alpha beta T cells that are MHC class II restricted and arthritogenic in vivo^[2].

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

| | |
|-----------------|---|
| Animal Model: | Naive recipient rats (DA) ^[2] |
| Dosage: | 500 µL of Pristane oil |
| Administration: | Intradermal injection |
| Result: | Both CD4 ⁺ , CD8 ⁺ αβT cells and B cells significantly expand in draining lymph nodes until day 6 after injection, whereafter the CD4 ⁺ αβT cells continue to expand until day 12 after injection. |

REFERENCES

[1]. J J Turner, et al. Krypton Fluoride: Preparation by the Matrix Isolation Technique. Science. 1963 May 31;140(3570):974-5.

[2]. Jens Holmberg, et al. Pristane, a non-antigenic adjuvant, induces MHC class II-restricted, arthritogenic T cells in the rat. J Immunol. 2006 Jan 15;176(2):1172-9.

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

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444

Email: customerservice@lifetechindia.com Website: www.lifetechindia.com