# Data Sheet (Cat.No.T39173)

TargetMol

## Varespladib sodium

### Chemical Properties

CAS No. : 172733-42-5

Formula: C21H19N2NaO5

Molecular Weight: 402.38

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

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|---|---|
| Description | Varespladib sodium is a potent and selective inhibitor of secretory phospholipase A2 (sPLA2), with an IC50 of approximately 9 nM against group IIA sPLA2. It exhibits nanomolar inhibitory activity in serum from various species, including rat, rabbit, guinea pig, and human. It is commonly used in research related to inflammation and lipid metabolism. |
| Targets(IC50) | Phospholipase |
| In vitro | Varespladib sodium (10 μM; 24 and 48 hours; HCjE cells) treatment Results: in complete inhibition of the RA-induced increase in MUC16 protein detected in cell lysates at both time points.<br>Varespladib sodium (10 μM; 24 and 48 hours; HCjE cells) treatment significantly inhibits RA-induced MUC16 expression by 100% at 24 hours and 99% at 48 hours.<br>Varespladib sodium at 10 μM significantly inhibited RA-induced MUC16 expression in HCjE cells at both 24 h and 48 h, as demonstrated by Western blot and RT-PCR analyses (100% inhibition at 24 h and 99% at 48 h)[2]. |
| In vivo | Varespladib sodium treatment inhibits human sPLA 2 -induced release of thromboxane A 2 (TXA 2 ) from isolated guinea pig lung bronchoalveolar lavage cells with an IC 50 of 0.79 μM. And the ED 50 for Varespladib sodium is 16.1 mg/kg.<br>Varespladib sodium, administered intravenously at 3, 10, and 30 mg/kg in male Hartley guinea pigs (300–500 g), consistently inhibited $sPLA_2$ activity in bronchoalveolar lavage fluid and reduced human $sPLA_2$-induced $TXA_2$ generation in BAL cells[1]. |

### Solubility Information

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|---|---|
| Solubility | DMSO: 10 mg/mL (24.85 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.4852 mL | 12.4261 mL | 24.8521 mL |
| 5 mM | 0.497 mL | 2.4852 mL | 4.9704 mL |
| 10 mM | 0.2485 mL | 1.2426 mL | 2.4852 mL |
| 50 mM | 0.0497 mL | 0.2485 mL | 0.497 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.

Reference

Snyder DW, et al. Pharmacology of LY315920/S-5920, [[3-(aminooxoacetyl)-2-ethyl-1- (phenylmethyl)-1H-indol-4-yl]oxy] acetate, a potent and selective secretory phospholipase A2 inhibitor: A new class of anti-inflammatory drugs, SPI. J Pharmacol Exp Ther. 1999 Mar;288(3):1117-24.

Hori Y, et al. Effect of retinoic acid on gene expression in human conjunctival epithelium: secretory phospholipase A2 mediates retinoic acid induction of MUC16. Invest Ophthalmol Vis Sci. 2005 Nov;46(11):4050-61.