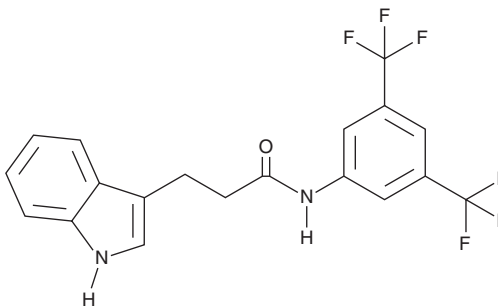


# PRODUCT INFORMATION



## PLD<sub>1</sub> Inhibitor Item No. 42918

**CAS Registry No.:** 1001957-60-3  
**Formal Name:** N-[3,5-bis(trifluoromethyl)phenyl]-1H-indole-3-propanamide  
**Synonym:** Phospholipase D<sub>1</sub> Inhibitor  
**MF:** C<sub>19</sub>H<sub>14</sub>F<sub>6</sub>N<sub>2</sub>O  
**FW:** 400.3  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

PLD<sub>1</sub> inhibitor is supplied as a solid. A stock solution may be made by dissolving the PLD<sub>1</sub> inhibitor in the solvent of choice, which should be purged with an inert gas. PLD<sub>1</sub> inhibitor is soluble (≥10 mg/ml) in ethanol and DMSO.

### Description

PLD<sub>1</sub> inhibitor is an inhibitor of phospholipase D<sub>1</sub> (PLD<sub>1</sub>).<sup>1</sup> It inhibits PLD activity in PLD<sub>1</sub>-overexpressing A549 cells (IC<sub>50</sub> = 1.97 μM). PLD<sub>1</sub> inhibitor reduces the viability of A549 lung cancer and HCT116 colorectal cancer cells (IC<sub>50</sub>s = 18 and 29 μM, respectively). It also inhibits the proliferation, migration, and invasion of A549 cells and induces apoptosis in the same cells. PLD<sub>1</sub> inhibitor (10 mg/kg every other day) reduces tumor growth, induces intratumoral apoptosis, and decreases Ras, CD47, CD24, and programmed cell death 1 ligand 1 (PD-L1) levels in a murine Lewis lung carcinoma model.

### Reference

1. Song, D., Lim, S.H., Kim, Y., *et al.* Development and evaluation of indole-based phospholipase D inhibitors for lung cancer immunotherapy. *J. Med. Chem.* 5170-5189 (2025).

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
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