

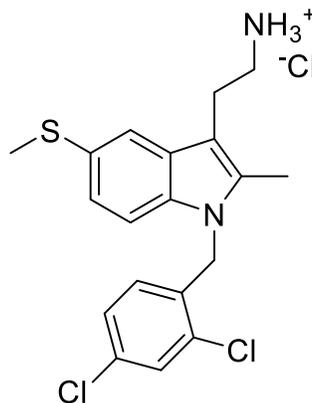
K149 (SHIP2 Inhibitor)

Catalog number: B-0345

Molecular Formula: $C_{19}H_{21}Cl_3N_2S$

MW: 414.81

CAS: 1071547-54-1



Alternate Name: 2-(1-(2,4-dichlorobenzyl)-2-methyl-5-(methylthio)-1H-indol-3-yl)ethan-1-aminium chloride

Solubility: DMSO

Storage and Handling: Store dry at $-20\text{ }^{\circ}\text{C}$. Stock solutions should be stored frozen ($-20\text{ }^{\circ}\text{C}$ or below).

Background: SH2-Domain containing inositol 5-phosphatases (SHIP1 & SHIP2) dephosphorylate the 5-position of $PI(3,4,5)P_3$ generating $PI(3,4)P_2$. $PI(3,4)P_2$ activates Protein Kinase B (PKB/Akt) and promotes cell survival. SHIP2 expression and activity is increased in colorectal cancer suggesting an oncogenic role. Treatment of colorectal cancer cells with K149 ($2\text{ }\mu\text{M}$) decreases PKB/Akt signaling and sensitizes the cells to 5-fluorouracil regardless of whether the cell lines have a *PI3KCA* mutation.

References: E. Hoekstra, A.H. Das, *et al.* "Lipid phosphatase SHIP2 functions as oncogene in colorectal cancer by regulating PKB activation" *Oncotarget* 2016; 7:73525-73540. DOI: 10.18632/oncotarget.12321

Hazardous Properties and Cautions: The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

Warranty and Disclaimer: Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

