

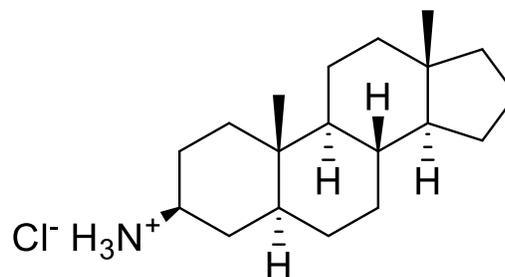
## K118 (SHIP1 Inhibitor)

Catalog number: B-0344

Molecular Formula:  $C_{19}H_{34}ClN$

MW: 311.93

CAS: 54156-23-9



Alternate Name: 3β-Amino-5α-androstanane, hydrochloride salt

Solubility: MeOH 5 mg/mL, Water 0.5 mg/mL

Storage and Handling: Store dry at 4 °C. Stock solutions should be stored frozen (-20 °C or below).

**Background:** SH2-Domain containing inositol 5-phosphatases (SHIP1 & SHIP2) dephosphorylate the 5-position of PI(3,4,5)P<sub>3</sub> generating PI(3,4)P<sub>2</sub>. SHIP2 is ubiquitously expressed while SHIP1 is found in hematolymphoid cells and mesenchymal stem cells. K118 is a water soluble SHIP1 inhibitor which does not inhibit SHIP2. Treatment with K118 (10 mg/kg) on obese mice on a high fat diet resulted in reduced body mass and lowered fat content when compared to pre-treatment and non-treated control animals. The treated mice had reduced blood glucose and insulin levels in addition to improved glucose tolerance. K118 treatment also reduced the amount of age-related fat accumulation in mice.

**References:** 1) R. Brooks, *et al.* "Coordinate Expansion of Murine Hematopoietic and Mesenchymal Stem Cell Compartments by SHIPi", *Stem Cells*, 2015, *33*, 848-858. doi:10.1002/stem.1902 2) N. Srivastava "A small-molecule inhibitor of SHIP1 reverses age- and diet-associated obesity and metabolic syndrome" *JCI Insight*, 2016, *1*, e88544 doi:10.1172/jci.insight.88544.

**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.

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