

Echelon Biosciences Inc. 675 Arapeen Drive, Suite 302 Salt Lake City, UT 84108 Telephone 866-588-0455 Fax 801-588-0497 echelon@echelon-inc.com www.echelon-inc.com **Technical Data Sheet**

For research use only

Not intended or approved for diagnostic or therapeutic use.

Product Name: K118 (3 β -Amino-5 α -androstanane, hydrochloride

salt; SHIP1 Inhibitor)

Product Number: B-0344

Molecular Formula: $C_{19}H_{34}CIN$ **MW:** 311.93 **CAS:** 54156-23-9

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

Storage: 4°C or below

Field of Interest: SH2-Domain containing inositol 5-phosphatases (SHIP1 & SHIP2) dephosphorylate the 5-position of PI(3,4,5)P₃ generating PI(3,4)P₂. SHIP2 is ubiquitously expressed while SHIP1 is found in hematolymphoid cells and mesancymal 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. K118 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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TDS B-0344 Rev: 1 (11/10/16)