

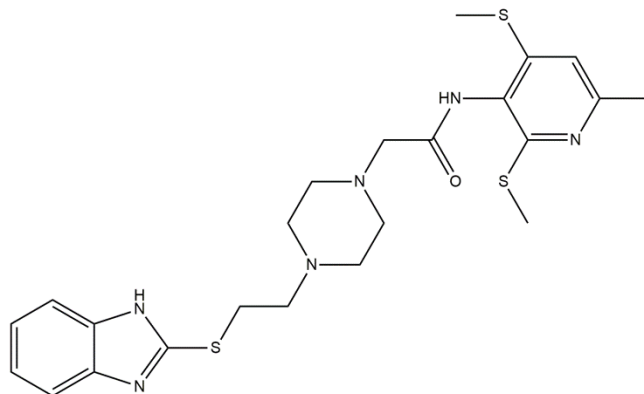
K-604, ACAT-1 inhibitor

10/19

ALTERNATE NAMES: 2-(4-(2-(1H-benzo[d]imidazol-2-ylthio)ethyl)piperazin-1-yl)-N-(6-methyl-2,4-bis(methylthio)pyridin-3-yl)acetamide; 4-[2-(1H-Benzimidazol-2-ylthio)ethyl]-N-[6-methyl-2,4-bis(methylthio)-3-pyridinyl]-1-piperazineacetamide

CATALOG #: B2926-5 5 mg
B2926-25 25 mg

STRUCTURE:



MOLECULAR FORMULA: C₂₃H₃₀N₆OS₃

MOLECULAR WEIGHT: 502.72

CAS NUMBER: 561023-90-3

APPEARANCE: Solid

PURITY: 95%

SOLUBILITY: Soluble in DMSO

DESCRIPTION: K-604 is an inhibitor of acyl-CoA:cholesterol acyltransferase 1 (ACAT1). The IC₅₀ values of K-604 for human ACAT-1 and ACAT-2 are 0.45 μM and 102.85 μM respectively, showing that K-604 is 229-fold more selective for ACAT-1. It suppresses the development of atherosclerosis in an animal model without affecting plasma cholesterol levels. It stimulates collagen production in cultured smooth muscle cells and modulates plaque phenotype in apolipoprotein E-knockout mice.

STORAGE TEMPERATURE: -20°C Store in the dark. Product is light sensitive. Protect from air. Store under desiccating conditions.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Ikenoya, M., Yoshinaka, Y., Kobayashi, H., et al. A selective ACAT-1 inhibitor, K-604, suppresses fatty streak lesions in fat-fed hamsters without affecting plasma cholesterol levels. *Atherosclerosis*. 191(2):290-7 (2007).
2. Yoshinaka, Y., Shibata, H., Kobayashi, H., et al. A selective ACAT-1 inhibitor, K-604, stimulates collagen production in cultured smooth muscle cells and alters plaque phenotype in apolipoprotein E-knockout mice. *Atherosclerosis*. 213(1):85-91 (2010).

RELATED PRODUCTS:

Naringenin (Cat. No. 1772)
 Terpendole (Cat. No. 2214)
 Penicillide (Cat. No. B1245)
 Avasimibe (Cat. No. 9506)
 Pellitorine (Cat. No. 2053)

DISCLAIMER: *FOR RESEARCH USE ONLY! Not to be used on humans.*