

K-604 dihydrochloride

Catalog No: tcsc0018788



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg



Specifications

CAS No:

217094-32-1

Formula:

$C_{23}H_{32}Cl_2N_6OS_3$

Pathway:

Metabolic Enzyme/Protease

Target:

Acyltransferase

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

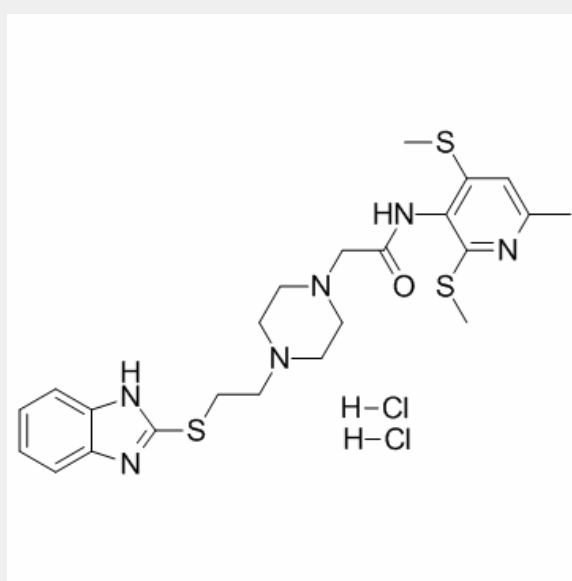
Observed Molecular Weight:

575.64

Product Description

K-604 dihydrochloride is a potent and selective acyl-CoA:cholesterol acyltransferase 1 (**ACAT-1**) inhibitor with an **IC₅₀** of 0.45±0.06 μM.

In Vivo: Using F1B hamsters, an animal model susceptible to diet-induced hyperlipidemia and atherosclerosis, the effects of K-604 on aortic lesion areas and plasma cholesterol levels are assessed. Administration of K-604 does not affect body weight or food consumption. The plasma cholesterol levels in fat-fed hamsters are ~12-fold higher than those in chow-fed hamsters, which are significantly decreased by K-604 only at the highest dose tested (30 mg/kg) but not at lower doses (1-10 mg/kg). The fatty streak lesions stain with oil red O are markedly induced by the high-fat diet, which is significantly reduced by administration of K-604. Further, the histological analyses of the atherosclerotic lesions are performed. The fatty streak lesions in the control group are characterized by accumulation of foamy macrophages in the subendothelial space. In contrast, the areas occupied by foamy macrophages are markedly reduced by administration of K-604^[1].



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