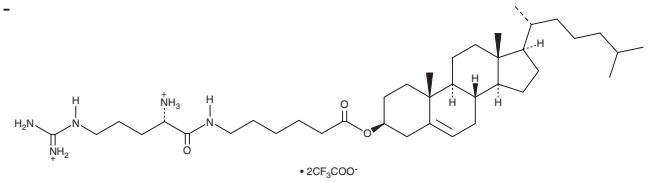
PRODUCT INFORMATION

Cho-Arg (trifluoroacetate salt)

Item No. 25943

CAS Registry No.: 1609010-56-1
Formal Name: cholest-5-en-3-ol (3β)-3-[6-[[(2S)-2-amino-5-[(aminoiminomethyl)amino]-1-oxopentyl]amino]hexanoate], 2,2,2-trifluoroacetate (1:2)
MF: $C_{39}H_{71}N_5O_3 \bullet 2CF_3COO$
FW: 884.1
Purity: ≥95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cho-Arg (trifluoroacetate salt) is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of Cho-Arg (trifluoroacetate salt) in these solvents is approximately 50 mg/ml.

Cho-Arg (trifluoroacetate salt) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of Cho-Arg (trifluoroacetate salt) should be diluted with the aqueous buffer of choice. Cho-Arg (trifluoroacetate salt) has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method.

Description

Cho-Arg is a steroid-based cationic lipid that contains a cholesterol skeleton coupled to an L-arginine head group.[1] It forms a complex with plasmid DNA and decreases plasmid DNA migration in an agarose-gel retardant assay at charge ratios greater than or equal to 4. Cho-Arg facilitates transfection of plasmid DNA into H1299 and HeLa cells in the presence or absence of fetal bovine serum, an effect that is reversed by the lipid raft-mediated endocytosis inhibitor methyl-β-cyclodextrin (Item No. 21633) and the caveolae-mediated endocytosis inhibitor genistein (Item No. 10005167). It is cytotoxic to H1299 cells (IC_{50} = 88.5 µg/ml).

Reference

1. Sheng, R., Wang, Z., Luo, T., *et al.* Skeleton-controlled pDNA delivery of renewable steroid-based cationic lipids, the endocytosis pathway analysis and intracellular localization. *Int. J. Mol. Sci.* **19(2)**, e369 (2018).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM