Product Data Sheet

Product Name: INF7TAT acetate
Cat. No.: GC81840

Chemical Properties

Cas. No.

Formula	$C_{179}H_{268}N_{54}O_{48}S{\cdot}xC_2H_4O_2$	M.Wt	3976.44
Solubility	H_2O: 25 mg/mL (Need ultrasonic)	Storage	Sealed storage, away from moisture
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure

Background

INF7TAT acetate is an amphipathic cell-penetrating peptide that mediates intracellular delivery of CRISPR ribonucleoproteins. INF7TAT acetate achieves endosomal escape via the INF7 fragment and cell binding via the TAT fragment. It enables intracellular delivery into primary human T cells and hematopoietic stem and progenitor cells, facilitating gene knockout and AAV-mediated homology-

directed repair. INF7TAT acetate can be used for genome editing-related research [1] [2].

In Vitro, INF7TAT acetate is the amphipathic peptide backbone of the PERC delivery system, and its engineered variants INF7TAT-A5K / INF7TAT-P55 enable efficient intracellular delivery of Cas9 RNP and Cas12a RNP into human primary T cells and human primary hematopoietic stem and progenitor cells (HSPC) without electroporation equipment[1].

References:
[1]. Vo N, et al. Calcium Shock Enables Efficient and Programmable Particle Delivery for Genome Editing Applications. Advanced science (Weinheim, Baden-Wurttemberg, Germany). 2026 Apr;13(21):e10441.
[2]. Sahu SU, et al. Peptide-enabled ribonucleoprotein delivery for CRISPR engineering (PERC) in primary human immune cells and hematopoietic stem cells. Nature protocols. 2025 Oct;20(10):2735-2770.