Data Sheet (Cat.No.TP2608)

TargetMol

Nanrilkefusp alfa

Chemical Properties

CAS No. : 1416390-27-6

Formula:

Molecular Weight:

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Nanrilkefusp alfa (SO-C101; SOT101), a fusion protein, serves as a powerful and selective agonist of the IL-15 and IL-15Rα sushi + domain. It promotes the proliferation and activation of memory CD8 + T cells, natural killer (NK) cells, γ/δ T cells, and NKT cells to inhibit tumor growth. Nanrilkefusp alfa demonstrates remarkable anti-metastatic effects in melanoma and effectively suppresses tumor progression in various mouse tumor models [1] [2].
In vitro	Nanrilkefusp alfa, at concentrations ranging from 0.01 to 10 nM over 7 days, expands and activates NK cell subtypes from human PBMCs in vitro. At 1 nM for 20 hours, it induces cytotoxic and tumor cell-killing activity in human NK cell subtypes. Additionally, at 0.1, 1, and 10 nM for both 3-day and 7-day durations, it stimulates the expression of cytotoxic receptors NKp30, DNAM-1, and NKG2D on human NK cells [1].
In vivo	Nanrilkefusp alfa administered subcutaneously at 2 mg/kg for 4 consecutive days over 2 weeks reduces tumor development and growth in the metastatic kidney cancer Renca mouse model, dependent on natural killer (NK) and CD8+ T cells. It also activates NK and CD8+ T cytotoxicity genes in the TC-1 tumor model. In the TRAMP-C2 tumor mouse model, intraperitoneal administration of Nanrilkefusp alfa at 1 mg/kg, with or without 12.5 mg/kg anti-PD-1, for 4 consecutive days over 2 weeks, reduces established tumor growth and expands CD8+ T cell and NK cell populations while sparing T regulatory cells (Tregs). The compound mediates inhibition of TRAMP-C2 tumor development, primarily relying on NK and CD8+ T cells. In both models, Nanrilkefusp alfa demonstrates effectiveness in activating immune cells and reducing tumor growth.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481