

UC-1V150

Chemical Properties

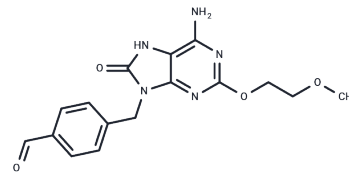
CAS No. : 927822-45-5

Formula: C₁₆H₁₇N₅O₄

Molecular Weight: 343.34

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	UC-1V150 is a distinct TLR7 agonist, which activates cellular immune responses and exhibits anti-tumor effects. It also serves as a precursor for the synthesis of ISAC molecules, known as immune-stimulating antibody conjugates [1] [2].
In vitro	UC-1V150, at concentrations ranging from 0.01 to 10 µM over a 24-hour period, effectively promotes the secretion of IL-6 and IL-2 cytokines in bone-marrow-derived macrophages [1]. Additionally, when administered at 1 µg/mL for 48 hours, it enhances the expression of FcγRIIA and FcγRIII and induces a roughly 1.5-fold enhancement in the phagocytosis index of target cells in human monocyte-derived macrophages (hMDM) [2].
In vivo	UC-1V150, administered via a single intravenous injection at concentrations ranging from 0.38-38 nM for 2 hours, effectively triggers the release of serum cytokines in female C57BL/6 mice aged 5-6 weeks. This administration resulted in serum interleukin-6 (IL-6) levels reaching approximately 0.1 ng/mL and interleukin-2 (IL-2) levels reaching approximately 1.5 ng/mL at the 38 nM concentration.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.9126 mL	14.5628 mL	29.1256 mL
5 mM	0.5825 mL	2.9126 mL	5.8251 mL
10 mM	0.2913 mL	1.4563 mL	2.9126 mL
50 mM	0.0583 mL	0.2913 mL	0.5825 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use

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