Product Name: Poly(I:C)  
Catalog No.: 4287  
Batch No.: 3  
CAS Number: 42424-50-0  
IUPAC Name: Polyinosinic-polycytidylic acid sodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \((C_{10}H_{13}N_4O_8P)_x(C_{9}H_{14}N_3O_8P)_x\)
   Physical Appearance: White solid
   Solubility: water to 3 mg/ml
   Storage: Store at -20°C

2. ANALYTICAL DATA

   UV Absorption: \(\lambda_{\text{max}}: 265.5\ \text{nm}\)
Description:
Synthetic double-stranded RNA (dsRNA); Toll-like receptor 3 (TLR3) agonist. Aids generation of stable, mature dendritic cells in combination with TLR8 agonist CL075. Transfection into NIT-1 β cells induces β-cell apoptosis. Commonly used to stimulate immune system activation in vivo. Also promotes maturation of hPSC-derived cardiomyocytes. To prevent denaturation, this product should be reconstituted in solutions with physiological salt concentrations.

Physical and Chemical Properties:
Batch Molecular Formula: \((\text{C}_{10}\text{H}_{12}\text{N}_{4}\text{O}_{6}\text{P})_x(\text{C}_9\text{H}_{14}\text{N}_2\text{O}_8\text{P})_x\)
Physical Appearance: White solid

Storage: Store at -20°C

Solubility & Usage Info:
water to 3 mg/ml

Stability and Solubility Advice:
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References: