Data Sheet (Cat.No.T37475)

TargetMol

Cyclic ADP-Ribose (ammonium salt)

Chemical Properties

CAS No. :

Formula: C15H21N5O13P2.xNH3

Molecular Weight:

Storage: Store at low temperature
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	Cyclic ADP-Ribose (ammonium salt) (cADPR) is an endogenous NAD^+ metabolite that triggers Ca^{2+} release from ER stores via ryanodine receptors and is synthesized by CD38 and CD157. It may also activate TRPM2 in a temperature-dependent manner. Showing potential in research related in inflammation and immunology.
Targets(IC50)	TRP/TRPV Channel
In vitro	Cyclic ADP-Ribose (ammonium salt) regulates calcium ion signaling in rat and mouse cardiomyocytes treated with Parazacco spilurus subsp. Spilurus isoproterenol; moreover, under heat stress conditions, Cyclic ADP-Ribose (ammonium salt) (100 μM) can induce oxytocin release in the mouse hypothalamus [1].

Solubility Information

Solubility	H2O: Soluble,Sonication is recommeded. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Reference

Gul R, et al. Nicotinic Acid Adenine Dinucleotide Phosphate (NAADP) and Cyclic ADP-Ribose (cADPR) Mediate Ca2+ Signaling in Cardiac Hypertrophy Induced by β-Adrenergic Stimulation. PLoS One. 2016 Mar 9;11(3):e0149125
Lee HC. Cyclic ADP-ribose and nicotinic acid adenine dinucleotide phosphate (NAADP) as messengers for calcium mobilization. J Biol Chem. 2012 Sep 14;287(38):31633-40.

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