Cyclic di-AMP (sodium salt)

Item No. 17753

CAS Registry No.: 2734909-87-4

Formal Name: adenyl-(3’→5’)-3’-adenylic acid, cyclic nucleotide, disodium salt

Synonyms: c-di-AMP, Cyclic di-Adenosine monophosphate, Cyclic diadenylate, 3’,5’-Cyclic diadenylic acid

MF: C_{20}H_{22}N_{10}O_{12}P_{2} ⋅ 2Na

FW: 702.4

Purity: ≥98%

UV/Vis.: λ_{max}: 205, 260 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cyclic di-AMP (c-di-AMP) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the c-di-AMP (sodium salt) in the solvent of choice. The solubility of c-di-AMP (sodium salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

c-di-AMP is a second messenger produced by bacteria but not by mammals. Generated by a family of diadenylate cyclases, c-di-AMP can impact bacterial cell growth, cell wall homeostasis, pathogenicity, and other cellular functions.1-3 Bacteria-derived cyclic dinucleotides, including c-di-AMP, trigger the expression of interferon genes in mammalian cells.4,5

References

1. Schaap, P. Cyclic di-nucleotide signaling enters the eukaryote domain. IUBMB Life 65(11), 897-903 (2013).