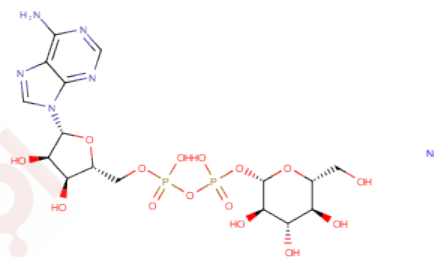


ADP-Glucose (sodium salt)

Chemical Properties

CAS No. : 102129-65-7
 Formula: C₁₆H₂₃N₅Na₂O₁₅P₂
 Molecular Weight: 633.31
 Storage: 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 | ADP-Glucose (ADPG) is an immediate precursor used in the biosynthesis, by glucose addition, of storage polysaccharides in plants, green algae, and cyanobacteria, as well as structural polysaccharides in certain bacteria.[1],[2] It is used by amylose synthases or starch synthases in plastids in the production of amylose, amylopectins, starch, and other polysaccharides. ADPG is normally generated within plastids, although it can be biosynthesized in the cytoplasm of certain grasses and imported into plastids by a membrane-bound transporter.[3] |
| Targets(IC50) | Others |

Solubility Information

| | |
|------------|---|
| Solubility | PBS (pH 7.2): 10 mg/mL (15.79 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble) |
|------------|---|

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|-------|-----------|-----------|------------|
| 1 mM | 1.579 mL | 7.895 mL | 15.7901 mL |
| 5 mM | 0.3158 mL | 1.579 mL | 3.158 mL |
| 10 mM | 0.1579 mL | 0.7895 mL | 1.579 mL |
| 50 mM | 0.0316 mL | 0.1579 mL | 0.3158 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

- Ball, S.G., and Morell, M.K. From bacterial glycogen to starch: understanding the biogenesis of the plant starch granule. *Annu.Rev.Plant Biol.* 54, 207-233 (2003).
- Sambou, T., Dinadayala, P., Stadthagen, G., et al. Capsular glucan and intracellular glycogen of *Mycobacterium tuberculosis*: Biosynthesis and impact on the persistence in mice. *Molecular Microbiology* 70(3), 762-774 (2008).
- Comparot-Moss, S., and Denyer, K. The evolution of the starch biosynthetic pathway in cereals and other grasses. *Journal of Experimental Botany* 60(9), 2481-2492 (2009).

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