ATP

Cat. No.: HY-B2176
CAS No.: 56-65-5
Molecular Formula: C₁₀H₁₆N₅O₁₃P₃
Molecular Weight: 507.18
Target: Endogenous Metabolite
Pathway: Metabolic Enzyme/Protease
Storage: Powder
-20°C 3 years
4°C 2 years
In solvent
-80°C 6 months
-20°C 1 month

Solvent & Solubility

<table>
<thead>
<tr>
<th>In Vitro</th>
<th>H₂O : ≥ 100 mg/mL (197.17 mM)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>“≥” means soluble, but saturation unknown.</em></td>
<td></td>
</tr>
<tr>
<td>Preparing Stock Solutions</td>
<td></td>
</tr>
<tr>
<td>Solvent Concentration</td>
<td>Mass (1 mg)</td>
</tr>
<tr>
<td>1 mM</td>
<td>1.9717 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3943 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.1972 mL</td>
</tr>
</tbody>
</table>

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description
ATP is a central component of energy storage and metabolism in vivo, provides the metabolic energy to drive metabolic pumps and serves as a coenzyme in cells.

In Vitro
ATP (100-300 µM) inhibits the production of TNF-α by 32±8%, and at 300 µM, the attenuation of TNF-α production is 65±4% in LPS + PHA-stimulated whole blood. ATP (100, 300 µM) increases IL-10 levels by 48±5% (p=0.01) and 62±7%, respectively, in LPS + PHA-stimulated whole blood. ATP does not significantly alter the production of IL-6.

REFERENCES
