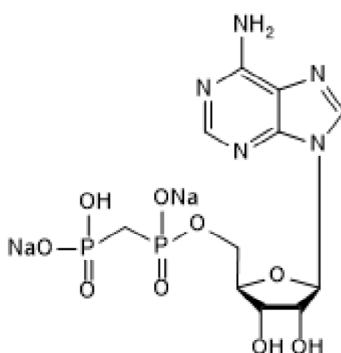


Product Name: Adenosine 5'-(α,β -methylene)diphosphate disodium salt **Catalog No.:** 8173 **Batch No.:** 2
CAS Number: 104835-70-3
IUPAC Name: α,β -Methyleneadenosine 5'-diphosphate disodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₁₅N₅Na₂O₉P₂
Batch Molecular Weight: 469.19
Physical Appearance: Off White solid
Solubility: PBS to 10 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.6% purity
Mass Spectrum: Consistent with structure

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Product Name: Adenosine 5'-(α,β -methylene)diphosphate disodium salt **Catalog No.:** 8173 **Batch No.:** 2
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Description:

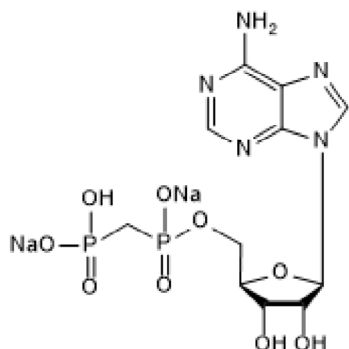
Adenosine 5'-(α,β -methylene)diphosphate sodium salt is an ecto-5'-nucleotidase/CD73 inhibitor. Blocks ecto-5'-nucleotidase-mediated adenosine production by preventing the conversion of AMP to adenosine. Reverses doxorubicin-resistance in ecto-5'-nucleotidase-positive MDR cells (MCF7/A6 and L1210/A). Also increases rhodamine uptake and inhibits rhodamine efflux from ecto-5'-nucleotidase-positive MDR cells. Vasoconstrictor, induces inflammation in a rodent model of pleurisy, and reduces memory loss induced by $A\beta_{1-42}$ in a mouse model of Alzheimer's disease. Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{11}H_{15}N_5Na_2O_9P_2$
 Batch Molecular Weight: 469.19
 Physical Appearance: Off White solid

Minimum Purity: $\geq 98\%$

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

PBS to 10 mM

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Caiazzo et al (2019) The ecto-5'-nucleotidase/CD73 inhibitor, α,β -methylene adenosine 5'-diphosphate, exacerbates carrageenan-induced pleurisy in rat. *Front.Pharmacol.* **10** 775. PMID: 31354490.
Chen et al (2019) Asthmatic augmentation of airway vagal activity involves decreased central expression and activity of CD73 in rats. *ACS Chem.Neurosci.* **10** 2809. PMID: 30913879.
Kur et al (2014) Purinergic control of vascular tone in the retina. *J.Physiol.* **592** 491. PMID: 24277867.

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