# **PRODUCT** INFORMATION



2'-Deoxyadenosine-5'-O-diphosphoribose (sodium salt)

Item No. 38356

Formal Name:	2'-deoxy-adenosine 5'-(trihydrogen diphosphate), P' $\rightarrow$ 5-ester with D-ribose, disodium salt	HO O O O OH
Synonym:	2'-deoxy ADPR	
MF:	$C_{15}H_{21}N_5O_{13}P_2 \bullet 2Na$	
FW:	587.3	• 2Na+
Purity:	≥98%	
Supplied as:	A solid	Ť
Storage:	-20°C	ŇН <sub>2</sub>
Stability:	≥4 years	

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

## Laboratory Procedures

2'-Deoxyadenosine-5'-O-diphosphoribose (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the 2'-deoxyadenosine-5'-O-diphosphoribose (sodium salt) in water. We do not recommend storing the aqueous solution for more than one day.

## Description

2'-Deoxyadenosine-5'-O-diphosphoribose is a transient receptor potential melastatin 2 (TRPM2) agonist.<sup>1</sup> It increases calcium-induced currents in an inside-out patch clamp assay using HEK293 cells expressing human TRPM2 when used at a concentration of 30 µM. 2'-Deoxyadenosine-5'-O-diphosphoribose has been found in Jurkat cells. It is also a substrate of nucleotide triphosphate diphosphatase 9 (NUDT9), a mitochondrial enzyme involved in hydrolyzing pyrophosphates.<sup>2</sup>

## References

- 1. Fliegert, R., Bauche, A., Pérez, A.-M.W., et al. 2'-Deoxyadenosine 5'-diphosphoribose is an endogenous TRPM2 superagonist. Nat. Chem. Biol. 13(9), 1036-1044 (2017).
- 2. Gattkowski, E., Rutherford, T.J., Möckl, F., et al. Analysis of ligand binding and resulting conformational changes in pyrophosphatase NUDT9. FEBS J. 288(23), 6769-6782 (2021).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFFTY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM