

PRODUCT INFORMATION



8-bromo Cyclic ADP-Ribose (sodium salt)

Item No. 18442

Formal Name: 8-bromo-1- β -D-ribofuranosyl-adenosine 5'-(trihydrogen diphosphate), intramol. P',5''-ester, disodium salt

Synonyms: 8-bromo cADPR, 8-bromo cADP-Ribose

MF: C₁₅H₁₈BrN₅O₁₃P₂ • 2Na

FW: 664.2

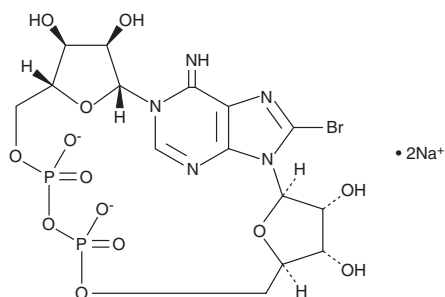
Purity: $\geq 95\%$

UV/Vis.: $\lambda_{\max}$: 213, 265 nm

Supplied as: A crystalline solid

Storage: -80°C

Stability: ≥ 4 years



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

Laboratory Procedures

8-bromo Cyclic ADP-ribose (8-bromo cADP-ribose) (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the 8-bromo cADP-ribose (sodium salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

8-bromo cADP-Ribose is a stable, cell-permeable analog that blocks calcium release evoked by cADP-ribose in sea urchin egg homogenates with an IC₅₀ value of 1.7 μ M.¹ It is commonly used to investigate intracellular signaling through cADP-ribose in isolated cells and tissues.²⁻⁵

References

1. Lee, H.C. Mechanisms of calcium signaling by cyclic ADP-ribose and NAADP. *Physiol. Rev.* **77**(4), 1133-1164 (1997).
2. Bowden, S.E.H., Selyanko, A.A., and Robbins, J. The role of ryanodine receptors in the cyclic ADP ribose modulation of the M-like current in rodent m1 muscarinic receptor-transformed NG108-15 cells. *J. Physiol.* **519**(Pt 1), 23-34 (1999).
3. Sanz, E., Monge, L., Fernandez, N., *et al.* Mechanisms of relaxation by urocortin in renal arteries from male and female rats. *Br. J. Pharmacol.* **140**(5), 1003-1007 (2003).
4. Durnin, L. and Mutafova-Yambolieva, V.N. Cyclic ADP-ribose requires CD38 to regulate the release of ATP in visceral smooth muscle. *FEBS J.* **278**(17), 3095-3108 (2011).
5. Park, D.R., Shawl, A.I., Ha, T.G., *et al.* Arginine thiazolidine carboxylate stimulates insulin secretion through production of Ca²⁺ - mobilizing second messengers NAADP and cADPR in pancreatic islets. *PLoS One* **10**(8), e0134962 (2015).

WARNING

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

SAFETY 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.

WARRANTY AND LIMITATION OF REMEDY

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.

Copyright Cayman Chemical Company, 12/05/2025

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