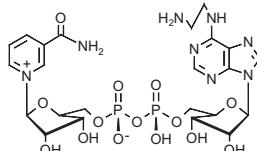


# NAD<sup>+</sup> and cADPR Signalling:

## High Purity Analogues of NAD<sup>+</sup>, cADPR and ADP-Ribose for Use in NAD<sup>+</sup> Research

### Analogues of NAD<sup>+</sup>

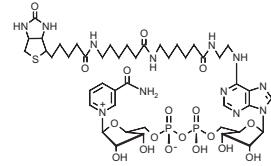
NAD<sup>+</sup> analogue that is suitable as a ligand in affinity chromatography or for coupling of various labelling structures.



#### 6-AE-NAD<sup>+</sup>

N 013-05, 5 µmol/~3.5 mg  
N 013-25, 5 x 5 µmol

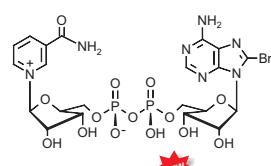
Biotinylated analogue of NAD<sup>+</sup> which can provide a non-radioactive alternative to radio-labelled NAD<sup>+</sup>.



#### 6-Biotin-17-NAD<sup>+</sup>

N 012-001, 0.1 µmol/~116 µg  
N 012-005, 5 x 0.1 µmol

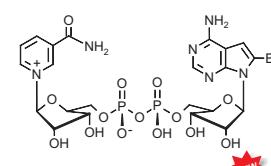
Brominated analogue of NAD<sup>+</sup> that can be utilized as a substrate by the ADP-ribosyl cyclase CD38.



#### 8-Br-NAD<sup>+</sup> NEW

N 017-10, 10 µmol/~7.4 mg  
N 017-50, 5 x 10 µmol

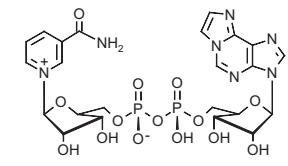
Potential substrate, competitive inhibitor or regulator of enzymes that interact with NAD<sup>+</sup>.



#### 8-Br-7-CH-NAD<sup>+</sup> NEW

N 016-01, 1 µmol/~0.7 mg  
N 016-05, 5 x 1 µmol

Fluorescent analogue of NAD<sup>+</sup> with  $\lambda_{\text{exc}}$  300 nm and  $\lambda_{\text{em}}$  415 nm, e.g. suitable for fluorometric assays.

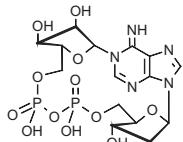


#### ε-NAD<sup>+</sup>

N 010-10, 10 µmol/~6.9 mg  
N 010-50, 5 x 10 µmol

### cADPR

cADPR is a second messenger that modulates calcium release in many biological systems incl. plants. It is formed by ADP-ribosyl cyclases from NAD<sup>+</sup>.

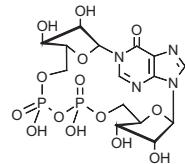


#### cADPR

C 005-005, 0.5 µmol/~270 µg  
C 005-025, 5 x 0.5 µmol

### cADPR Agonists

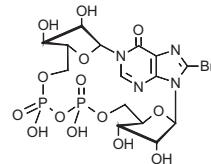
N<sup>1</sup>-cIDPR is a metabolically stable analogue of the second messenger cADPR.



#### N<sup>1</sup>-cIDPR

C 098-005, 0.5 µmol/~271 µg  
C 098-025, 5 x 0.5 µmol

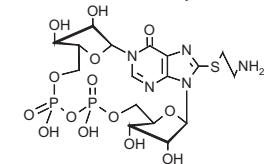
8-Br-N<sup>1</sup>-cIDPR is an analogue of cADPR that has higher cell-permeability and metabolic stability.



#### 8-Br-N<sup>1</sup>-cIDPR

B 071-005, 0.5 µmol/~311 µg  
B 071-025, 5 x 0.5 µmol

Analogue of the cADPR agonist N<sup>1</sup>-cIDPR which is suitable as a ligand in affinity chromatography or for coupling of various labelling structures incl. fluorophores.

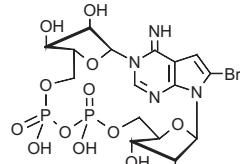


#### 8-AET-N<sup>1</sup>-cIDPR

A 140-005, 0.5 µmol/~309 µg  
A 140-025, 5 x 0.5 µmol

### cADPR Antagonists

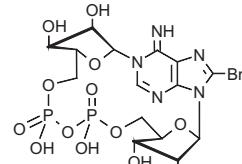
8-Br-7-CH-cADPR is a hydrolysis-resistant and membrane-permeant antagonist of the second messenger cADPR.



#### 8-Br-7-CH-cADPR NEW

B 100-005, 0.5 µmol/~310 µg  
B 100-025, 5 x 0.5 µmol

8-Br-cADPR is an antagonist of the second messenger cADPR.

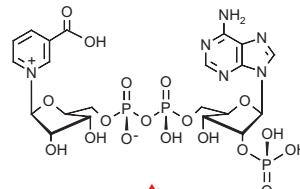


#### 8-Br-cADPR BULK

B 065-005, 0.5 µmol/~310 µg  
B 065-025, 5 x 0.5 µmol

### β-NAADP / Fluorescent β-NAADP

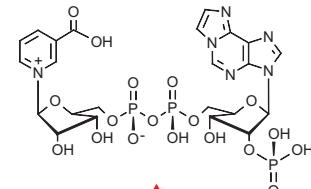
β-NAADP is a potent stimulator of intracellular Ca<sup>2+</sup> mobilization in a variety of cell types.



#### β-NAADP NEW

N 018-10, 10 µmol/~7.4 mg  
N 018-50, 5 x 10 µmol

Fluorescent analogue of the Ca<sup>2+</sup>-releasing messenger β-NAADP with  $\lambda_{\text{exc}}$  275 nm and  $\lambda_{\text{em}}$  410 nm.

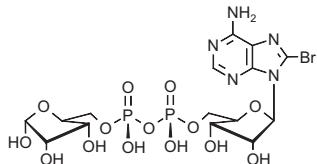


#### ε-NAADP NEW

N 019-05, 5 µmol/~3.8 mg  
N 019-25, 5 x 5 µmol

### Analogues of ADP-Ribose

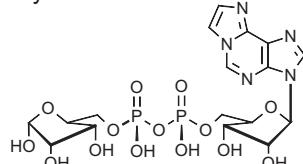
Antagonist of the second messenger ADP-ribose (ADPR), inhibiting ADPR-activated cation influx via TRPM2.



#### 8-Br-ADPR

B 051-05, 5 µmol/~3.2 mg  
B 051-25, 5 x 5 µmol

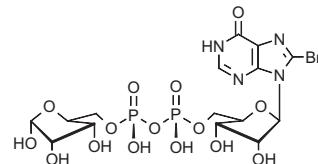
Fluorescent analogue of ADPR with  $\lambda_{\text{exc}}$  300 nm and  $\lambda_{\text{em}}$  410 nm that can be used in fluorometric assays.



#### ε-ADPR

E 013-10, 10 µmol/~5.8 mg  
E 013-50, 5 x 10 µmol

Analogue of the ADP-ribose antagonist 8-Br-ADPR.



#### 8-Br-IDPR

B 082-005, 0.5 µmol/~320 µg  
B 082-025, 5 x 0.5 µmol

**Biolog Life Science Institute**  
Flughafendamm 9a  
28199 Bremen  
Germany

Phone: +49 (0)421 591355  
Fax: +49 (0)421 5979713  
Web: www.biolog.de  
E-mail: service@biolog.de

Quality Management System  
**ISO 9001 Certified**

### International Distributors

**AUSTRALIA:** Sapphire • www.sapphirescience.com • sales@sapphirescience.com - **CANADA:** Axxora • www.axxora.com/BLG • biolog@axxora.com  
**CHINA:** Shanghai QSI Quality Technology Consulting Services • www.qcts.cn • info@qcts.cn - **ISRAEL:** Ornati Biochemicals • www.ornatbio.co.il • ornatbio@ornat.co.il  
**ITALY:** Società Italiana Chimici (SIC) • www.sichim.com • info@sichim.com - **JAPAN:** Nacalai Tesque, Inc. • www.nacalai.co.jp • info-tech@nacalai.co.jp  
**JAPAN:** Wako Pure Chemical Ind. • www.wako-chem.co.jp • labchem-tec@wako-chem.co.jp - **KOREA:** ServLab Co. • www.servlab.co.kr • servlab@servlab.co.kr  
**LATIN AMERICA:** Axxora • www.axxora.com/BLG • biolog@axxora.com - **NEW ZEALAND:** Sapphire • www.sapphirescience.com • sales@sapphirescience.com  
**POLAND:** Bionovo Bioresearch Equipment Biochemicals • www.bionovo.pl • biuro@bionovo.pl - **USA:** Axxora • www.axxora.com/BLG • biolog@axxora.com