Technical Information about 8- Bromo- cyclic adenosine diphosphate ribose

Update: August 8, 2018

Abbreviation: 8-Br-cADPR

<table>
<thead>
<tr>
<th>Formula</th>
<th>CAS No.</th>
<th>Molecular Weight</th>
<th>UV</th>
<th>BIOLOG Cat. No.</th>
</tr>
</thead>
</table>
| C_{15}H_{20}BrN_{5}O_{13}P_{2}  
(free acid) | [151898-26-9]       | 620.2            | $\lambda_{\text{max}}$ 264 nm / $\epsilon$ 15730 / pH 7 | B 065           |

Name: 8- Bromo- cyclic adenosine diphosphate ribose / 8- Bromo- cyclic adenosine diphosphoribose

Description: 8-Br-cADPR is an analogue of the second messenger cyclic adenosine diphosphate ribose (cADPR, BIOLOG Cat. No. C 005) in which the hydrogen in position 8 of the heterocyclic nucleobase is replaced by bromine.

Properties: Antagonist of the second messenger cADPR with increased membrane permeability.

Specification: Crystallized or lyophilized sodium salt. The free acid or other salt forms are available upon request. Please keep in mind that equal concentrations of the compound may look different in volume due to sensitivity of the lyophilized form to humidity. The compound can even contract to small volume droplets. Normally the product is located in the conical bottom of the tube. Micromolar quantities are determined by UV at $\lambda_{\text{max}}$.

Purity: Typical analysis is better than 95% (HPLC / UV / 264 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 8-Br-cADPR has excellent solubility in water and aqueous buffers (≥ 10.9 mM, limits have not been determined). Please rinse tube walls carefully and preferably use ultrasonic or vortex to achieve total and uniform mixing. When opening the tube please make sure that no substance is lost within the cap.

Stability and Storage: 8-Br-cADPR has limited stability at ambient temperature. Therefore, we recommend that the compound should be stored in the freezer (-20° Celsius necessary, -80° recommended), for longer storage periods preferably in freeze-dried form.

Toxicity and Safety: Since cADPR seems to have tasks in every organism, it is not unlikely that its analogues will interfere with many cell regulation processes in vivo. 8-Br-cADPR can cause serious irritation to eyes, skin, and respiratory/gastrointestinal tract. Avoid contact with eyes and skin or ingestion. Product is to be handled with care by trained laboratory personnel only. Our products are designed, developed and sold for research purposes only! They are intended for in vitro and nonhuman in vivo laboratory applications. Any other use requires approval of health authorities. Not for drug, household or related uses!

Material Safety Datasheet available on request.

Selected References for 8-Br-cADPR:


