Technical Information about 8-[DY-547]-AET-cAMP

Fluorescent analogue of cAMP

Update: July 20, 2012 WH

Abbreviation: 8-[DY-547]-AET-cAMP / fcAMP

<table>
<thead>
<tr>
<th>Formula</th>
<th>CAS No.</th>
<th>Molecular Weight</th>
<th>UV</th>
<th>BIOLOG Cat. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C_{26}H_{49}N_{8}O_{13}PS_{3}Na_{2}</td>
<td>[pending]</td>
<td>1047.1</td>
<td>( \lambda_{\text{max}} ) 559 nm / ( \varepsilon ) 150000 (EtOH)</td>
<td>D 109</td>
</tr>
</tbody>
</table>

Name: 8-\( (2\text{-}[DY-547]\text{-aminooethylthio})\)adenosine-3', 5'-cyclic monophosphate

Description: 8-[DY-547]-AET-cAMP is a fluorescent analogue of the parent second messenger cyclic AMP in which the dye is connected to position 8 of the adenine nucleobase via a 5-atom spacer.

Properties: 8-[DY-547]-AET-cAMP is a fluorescent cAMP analogue (\( \lambda_{\text{exc}} \) 557 nm, \( \lambda_{\text{em}} \) 574 nm), e.g. for research focussed on activation studies of HCN2 channels and other cAMP-responsive binding proteins.

Specification: Crystallized or lyophilized sodium salt. 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/VIS at \( \lambda_{\text{max}} \).

Purity: Typical analysis is better than 98% (HPLC / UV/VIS / 273 nm/550 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: 8-[DY-547]-AET-cAMP is soluble in water and aqueous buffers. 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-[DY-547]-AET-cAMP is chemically rather stable. Nevertheless, it should be protected from light and stored in the freezer, for longer storage periods preferably in freeze-dried form.

Toxicity and Safety: Since cyclic AMP has multiple tasks in every organism, it is very likely that its analogues will interfere with many cell regulation processes \textit{in vivo}. However, due to the rather small quantities to work with, no health hazards have been reported. Nevertheless please keep in mind, that the \textit{in vivo} properties of this compound are not sufficiently characterized up to now. Avoid skin contact or ingestion and allow only trained personnel to handle the product.

Our products are designed, developed and sold for research purposes only! They are intended for \textit{in vitro} and nonhuman \textit{in vivo} laboratory applications. Any other use requires approval of health authorities.

Not for drug, household or related uses!

References for 8-[DY-547]-AET-cAMP:
