

## - LIFE SCIENCE INSTITUTE -

## Technical Information about 7- Deaza- 2'- deoxyadenosine-5'- O- diphosphate (7-CH-dADP)

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## Abbreviation:

7-CH-dADP

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>11</sub> H <sub>16</sub> N <sub>4</sub> O <sub>9</sub> P <sub>2</sub> for free acid	[187478-96-2]	410.2 for free acid	$\lambda_{\text{max}}$ 269 nm / $\epsilon$ 12000 / pH 7	D 061

Name: 7- Deaza- 2'- deoxyadenosine- 5'- O- diphosphate (7-CH-dADP / 5'-dTuDP)

**Description:** 7-CH-dADP is an analogue of 2'- deoxyadenosine- 5'- O- diphosphate (dADP), where the nitrogen atom in position 7 of the adenine imidazole ring has been replaced by carbon and hydrogen, respectively.

Properties: Potential substrate, competitive inhibitor or regulator of enzymes that interact with dADP.

**Specification:** Sodium salt in aqueous solution (10 mM). The free acid or other salt forms are available upon request. Micromolar quantities are determined by UV at  $\lambda_{max}$ .

Purity: Typical analysis is better than 95% (HPLC / UV / 269 nm) at time of quality control and packing. The product is not sterile and has not been tested for endotoxins.

**Solubility:** 7-CH-dADP has excellent solubility in water or buffer and any reasonable concentration of interest can be achieved. 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. A short spin-down in a bench centrifuge is recommended before use.

**Stability and Storage:** 7-CH-dADP is relatively stable when stored frozen in aqueous solution (- 20° celsius necessary, - 80° recommended). In order to maintain its original high quality, it is recommended to allow thawing only before using the product. If you will not use up the vial with one application, please aliquot the content of the vial in order to avoid repeated freeze/thawing cycles for the rest. When making such aliquots be sure to operate quickly and to freeze the vial again as soon as possible.

**Toxicity and Safety:** Since nucleoside diphosphates have multiple tasks in every organism, it is very likely that ADP analogues will interfere with many cell regulation processes *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 *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 *in vitro* and nonhuman *in vivo* laboratory applications. Any other use requires approval of health authorities.

Not for drug, household or related uses!

References for 7-CH-dADP: 7-CH-dADP is a new structure, there are no references available at the moment.