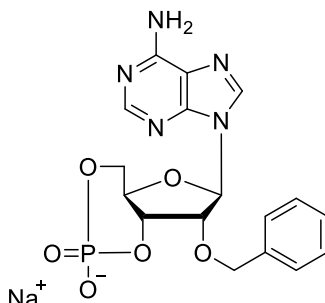


## Technical Information about 2'-O-Bn-cAMP

Update: May 17, 2019 HGG



**Abbreviation:** **2'-O-Bn-cAMP**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>17</sub> H <sub>17</sub> N <sub>5</sub> O <sub>6</sub> P · Na	[130471-74-8]	441.3	λ <sub>max</sub> 259 nm / ε 15000 / pH 7	B 061

**Name:** 2'-O- Benzyladenosine- 3', 5'- cyclic monophosphate ( 2'-O-Bn-cAMP )

**Description:** 2'-O-Bn-cAMP is an analogue of the natural signal molecule cyclic AMP where the hydroxyl group in position 2' of the ribose moiety has been etherified by a bulky and lipophilic benzyl group.

**Properties:** 2'-O-Bn-cAMP is suitable for cAMP receptor mapping studies, but does not activate protein kinase A.

**Specification:** Crystallized or lyophilized solid. Please keep in mind that equal amounts of the compound may look different in volume. Micromolar quantities are determined by UV at λ<sub>max</sub>.

**Purity:** Typical analysis is better than 98% (HPLC / UV / 259 nm). The product is not sterile and has not been tested for endotoxins.

**Stability and Storage:** 2'-O-Bn-cAMP is chemically stable under conditions of biological systems and media. Nevertheless, we recommend that the compound should be 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 cAMP analogs 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!**

### Selected References for 2'-O-Bn-cAMP:

Schwede, F., Bertinetti, D., Langerijs, C.N., Hadders, M.A., Wienk, H., Ellenbroek, J.H., de Koning, E.J.P., Bos, J.L., Herberg, F. W., Genieser, H.-G., Janssen, R.A.; Rehmann, H., *PLoS Biol.*, **13**, 1 - 26 (2015), "Structure-Guided Design of Selective Epac1 and Epac2 Agonists"