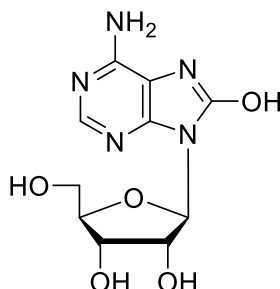


## Technical Information about 8- Hydroxyadenosine

Update: September 21, 2018 HU



**Abbreviation:** 8-OH-Ado

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> O <sub>5</sub>	[29851-57-8]	283.3	λ <sub>max</sub> 268 nm / ε 11000 / pH 7	H 011

**Name:** 8-Hydroxyadenosine; 8-Oxadenosine

**Description:** 8-Hydroxyadenosine is an analog of adenosine where the hydrogen in position 8 of the nucleobase is replaced by a hydroxy group.

**Properties:** Reference for analysis of oxidative stress RNA hydrolysates. For related nucleosides and nucleotides please inquire. The corresponding 2'-deoxynucleoside (Cat. No. D 050) and nucleobase (Cat. No. H 007) are available as well.

**Specification:** Crystallized or lyophilized solid. Please keep in mind that equal amounts of the compound may look different in volume depending on humidity. Micromolar quantities are determined by UV at 268 nm.

**Purity:** Typical analysis is better than 97% (HPLC / UV/ 268 nm). The product is not sterile and has not been tested for endotoxins.

**Solubility:** 8-Hydroxyadenosine has limited solubility in water or buffer. Sometimes, gentle heating is necessary to obtain clear solutions, also basic pH facilitates dissolution. Solubility in organic solvents like DMF or DMSO is significantly improved (at least 100 mM). When opening the tube make sure that no substance is lost within the cap. Please rinse tube walls carefully and preferably use ultrasonic or vortex to achieve total and uniform mixing.

**Stability and Storage:** 8-Hydroxyadenosine has sufficient stability at room temperature and does not need special care during handling or shipment. 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 adenosine has multiple tasks in every organism it is very likely that its analogs will interfere with many cell regulation processes *in vivo* as well. 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 Reference for 8-OH-Ado:

Douki, T.; Delatour, T.; Martini, R.; Cadet, J., *J. Chim. Phys.*, **96**, 138 - 142 (1999): "Radiation-Induced Degradation of DNA Bases"