Technical Information about Rp-ADP-α-S

Inhibitor or activator of ADP binding proteins

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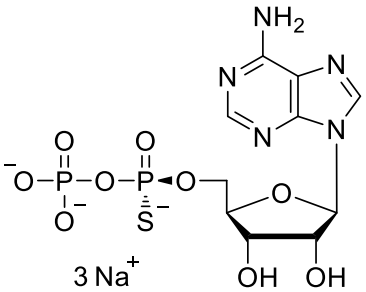

Abbreviation: **Rp-ADP-α-S**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat. No.
$C_{10}H_{15}N_5O_9P_2S$ (free acid)	[59331-71-4]	443.3 (acid)	λ_{max} 259 nm / ε 15200 / pH7	A 037

Name: Adenosine- 5'- O- (1- thiodiphosphate), Rp-isomer (Rp-ADP-α-S)

Description: Rp-ADP-α-S is an analogue of the parent nucleotide adenosine- 5'- diphosphate (ADP) in which a non-bridging oxygen in the α-phosphate is replaced by sulfur. The suffix "p" indicates that R/S nomenclature refers to phosphorus.

Properties:

- **ADP analogue with increased metabolic stability**
- **Useful for characterization of ADP-responsive receptors and determination of their stereospecificity**
- **Inhibitor or activator of ADP binding proteins depending on the target receptor**

Specification: 10 mM aqueous solution of the sodium salt. 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 259 nm. Other salt forms of Rp-ADP-α-S are available upon request.

Purity: Typical analysis is better than 95% (HPLC / UV/ 259 nm). The product is not sterile.

Solubility: Rp-ADP-α-S has excellent solubility in water or buffer. 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: Rp-ADP-α-S is relatively stable when stored in aqueous solution in the freezer (- 20º celsius necessary, - 80º recommended).

Toxicity and Safety: Since ADP has multiple tasks in every organism it is possible that also ADP 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 compounds 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!

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