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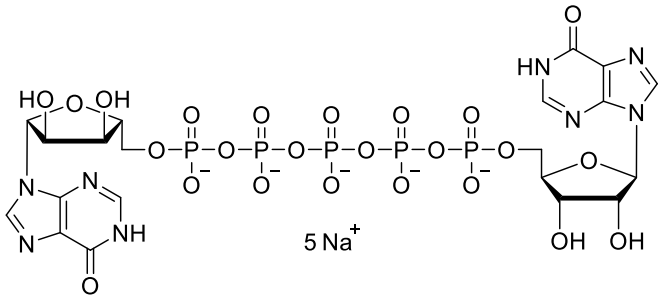
Technical Information about
P^1,P^5-Di-(inosine-5')-pentaphosphate

Update: August 08, 2019 HJ



Abbreviation: **Ip_5I / IpppppI**

Formula	CAS No.	Molecular Weight	UV	BIOLOG Cat.No.
$C_{20}H_{27}N_8O_{24}P_5$ (free acid)	[1294478-76-4]	918.3 (free acid)	λ_{max} 250 nm / ε 21600 / pH 7	D 160

Name: P^1, P^5- Di- (inosine- 5')- pentaphosphate

Description: In Ip_5I two inosine moieties are linked via their 5' positions by five phosphate groups.

Properties: Ip_5I is a $P2X_1$/$P2X_3$ receptor antagonist.

Specification: Lyophilized or crystallized sodium salt. The free acid or other salt forms are available upon request. Equal concentrations of Ip_5I can appear very 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 at λ_{max}.

Purity: Typical analysis is better than 95% (HPLC / UV / 250 nm). The product is not sterile and has not been tested for endotoxins.

Solubility: Ip_5I has good solubility in water and aqueous buffers (≥ 20 mM, limits have not been determined). 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: Ip_5I 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: 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 Ip_5I:

Dunn, P.M.; Liu, M.; Zhong, Y.; King, B.F.; Burnstock, G., *Br. J. Pharmacol.*, **130**, 1378 - 1384 (2000): "Diinosine Pentaphosphate: an Antagonist which Discriminates between Recombinant $P2X_3$ and $P2X_{2/3}$ Receptors and between Two P2X Receptors in Rat Sensory Neurones"

King, B.F.; Liu, M.; Pintor, J.; Gualix, J.; Miras-Portugal, M.T.; Burnstock, G., *Br. J. Pharmacol.*, **128**, 981 - 988 (1999): "Diinosine Pentaphosphate (IP_5I) is a Potent Antagonist at Recombinant Rat $P2X_1$ Receptors"

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