

Guanosine- 3'- O- monophosphate (3'-GMP) Biochemical

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CATALOG #
AAA52688

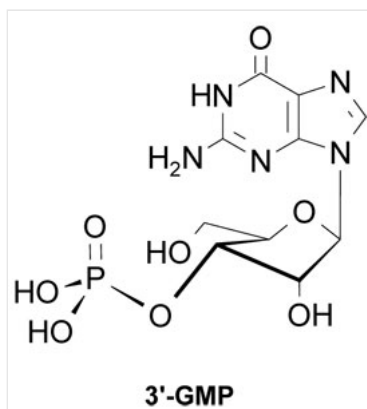
PRODUCT SYNONYMS

Guanosine- 3'- O- monophosphate (3'-GMP); Guanosine- 3'- O- monophosphate (3'-GMP) biochemical

PRODUCT SPECIFICATIONS

Purity/Purification	Typical analysis is better than 95% (HPLC / UV / 252 nm). The product is not sterile and has not been tested for endotoxins.
Unit Equivalent	10 umol is approximately equals to 3.6 mg
CAS No.	6027-83-4
Properties	3'-GMP is generated during enzymatic hydrolysis of guanosine-2',3'-cyclic monophosphate by 2',3'-cyclic nucleotide 2'-phosphodiesterase. It forms complexes with ribonuclease T1.
Specification	Crystallized or lyophilized sodium salt. For other salt forms please inquire. Please keep in mind that equal concentrations of the compound may look different in volume due to high 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 lambda-max.
Formula	$C_{10}H_{14}N_5O_8P$
Solubility	3'-GMP is soluble to at least 13 mM in water, 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.
Toxicity and Safety	Since nucleoside monophosphates have multiple tasks in every organism, it is very likely that corresponding 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.
Preparation and Storage	3'-GMP is chemically rather stable 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.

IMAGES



Structure

ADDITIONAL INFORMATION

Related Product Information for Guanosine- 3'- O- monophosphate (3'-GMP) biochemical

$C_{10}H_{14}N_5O_8P$; MW 363.2 (free acid); λ_{max} 252 nm; epsilon 13500; sodium salt; purity > 95% HPLC.

Metabolite formed during enzymatic hydrolysis of guanosine-2',3'-cyclic monophosphate by 2',3'-cyclic nucleotide 2'-phosphodiesterase and RNase. Forms complexes with ribonuclease T1. Detailed technical information available.

References: Zegers et al., *J. Biol. Chem.*, **269**, 127 - 133 (1994); Fernandez-Centeno & Heredia, *Comp. Biochem. Physiol. B Biochem. Mol. Biol.*, **125**, 161 - 167 (2000).

NCBI AND UNIPROT INFORMATION

Molecular Weight

363.2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/biochemical/guanosine-3-o-monophosphate-3-gmp/52688>