

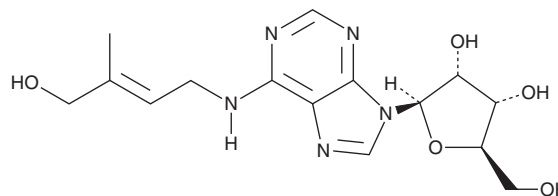
PRODUCT INFORMATION



trans-Zeatin Riboside

Item No. 30747

CAS Registry No.:	6025-53-2
Formal Name:	N-[(2E)-4-hydroxy-3-methyl-2-buten-1-yl]-adenosine
Synonyms:	Ribosyl- <i>trans</i> -Zeatin, Zeatin Ribonucleoside
MF:	C ₁₅ H ₂₁ N ₅ O ₅
FW:	351.4
Purity:	≥98%
UV/Vis.:	λ _{max} : 270 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Synthetic



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

trans-Zeatin riboside is supplied as a crystalline solid. A stock solution may be made by dissolving the *trans*-zeatin riboside in the solvent of choice, which should be purged with an inert gas. *trans*-Zeatin riboside is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of *trans*-zeatin riboside in these solvents is approximately 30 mg/ml.

trans-Zeatin riboside is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, *trans*-zeatin riboside should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. *trans*-Zeatin riboside has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

trans-Zeatin riboside is a cytokinin that has been found in squash root xylem sap.¹ It suppresses hypocotyl adventitious root formation in cucumber plants when used at concentrations ranging from 0.001 to 1 μM. *trans*-Zeatin riboside (10 μM) increases the activity of superoxide dismutase (SOD), ascorbate peroxidase (APX), catalase (CAT), and guaiacol peroxidase (POD) in the leaves, as well as improves turf quality and delays leaf wilting in a creeping bentgrass model of drought stress.²

References

1. Kuroha, T., Kato, H., Asami, T., *et al.* A *trans*-zeatin riboside in root xylem sap negatively regulates adventitious root formation on cucumber hypocotyls. *J. Exp. Bot.* **53(378)**, 2193-2200 (2002).
2. Chang, Z., Liu, Y., Dong, H., *et al.* Effects of cytokinin and nitrogen on drought tolerance of creeping bentgrass. *PLoS One* **11(4)**, e0154005 (2016).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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