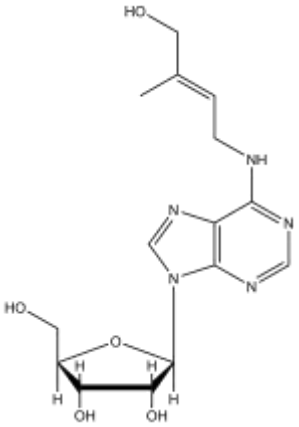
Z899
trans-Zeatin Riboside



Synonym:	9-(β-D-Ribofuranosyl) zeatin, (E)-N-(4-Hydroxy-3-methyl-2-butenyl)adenosine
CAS:	6025-53-2
Formula:	$C_{15}H_{21}N_5O_5$
MW:	351.36 g/mol

Properties:

Form:	Powder
Appearance:	White to Yellow to Beige Powder
Application:	Cytokinin
Solubility:	Minimum 10 mM KOH
Typical Working Concentration:	Varies by application, should be determined by the end user.
Storage Temp:	-20°C
Stock Solution Storage Temp:	-20°C
Other Notes:	Plant Tissue Culture Tested; For Research Use Only

Application Notes:

Zeatin riboside was first isolated in sweet corn (Letham, 1966). It is also known to be the most translocated cytokinin in terms of abundance in plants (Davey and van Staden, 1976). The de-ribosylated form, *trans*-Zeatin is considered to be the most potent of all the adenine-based cytokinins (Schmitz *et al.* 1972). Zeatin like other cytokinins promotes cell division, shoot proliferation and organogenesis, aids in the maintenance of the shoot-apical meristem, disrupts apical dominance, and delays senescence.

*Phyto*Technology Laboratories® also carries trans-Zeatin Riboside solution (1 mg/mL), Product No. Z875.

Please Note: While *Phyto*Technology Laboratories® tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

References:

Davey JE and J van Staden (1976) Cytokinin translocation: Changes in zeatin and zeatin-riboside levels in the root exudate of tomato plants during their development. *Planta* 130(1):69-72

Letham DS (1966) Purification and probable identity of a new cytokinin in sweet corn extracts. *Life Sciences* 5(6):551-554

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Schmitz RY, Skoog F, Playtis AJ, and NJ Leonard (1972) Cytokinins: Synthesis and Biological Activity of Geometric and Position Isomers of Zeatin. *Plant Physiol.* Vol. 50:702-705.

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