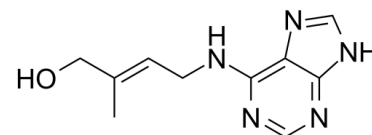


Data Sheet

Product Name:	trans-Zeatin
Cat. No.:	CS-0016292
CAS No.:	1637-39-4
Molecular Formula:	C ₁₀ H ₁₃ N ₅ O
Molecular Weight:	219.24
Target:	ERK; MEK
Pathway:	MAPK/ERK Pathway; Stem Cell/Wnt
Solubility:	DMSO : 25 mg/mL (114.03 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

trans-Zeatin is a plant cytokinin, which plays an important role in cell growth, differentiation, and division; trans-Zeatin also inhibits UV-induced **MEK/ERK** activation. IC₅₀ & Target: MEK/ERK^[2] **In Vitro:** trans-Zeatin is a plant cytokinin, which plays an important role in cell growth, differentiation, and division^[1]. trans-Zeatin (20, 40 or 80 μM) inhibits UV-induced MEK/ERK activation, upregulates AQP3 in a time- and dose-dependent manner, and attenuates UV induced loss of AQP3 in keratinocytes (HaCaT cells). UV-induced AQP3 downregulation is blocked by MEK/ERK inhibitors. Trans-Zeatin (80 μM) attenuates UV-induced downregulation of wound healing and water permeability in HaCaT cells^[2].

References:

[1]. Li Q, et al. Endogenous trans-zeatin content in plants with different metal-accumulating ability: a field survey. Environ Sci Pollut Res Int. 2016 Dec;23(23):23422-23435. Epub 2016 Sep 9.

[2]. Ji C, et al. Trans-Zeatin attenuates ultraviolet induced down-regulation of aquaporin-3 in cultured human skin keratinocytes. Int J Mol Med. 2010 Aug;26(2):257-63.

CAIndexNames:

2-Buten-1-ol, 2-methyl-4-(9H-purin-6-ylamino)-, (2E)-

SMILES:

OC/C(C)=C/CNC1=C2N=CNC2=NC=N1

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA