

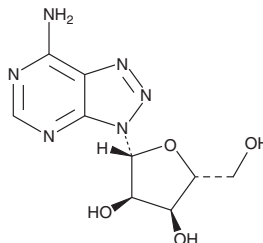
PRODUCT INFORMATION



8-Azaadenosine

Item No. 34622

CAS Registry No.: 10299-44-2
Formal Name: 3-β-D-ribofuranosyl-3H-1,2,3-triazolo[4,5-d]pyrimidin-7-amine
Synonym: NSC 72961
MF: C₉H₁₂N₆O₄
FW: 268.2
Purity: ≥98%
UV/Vis.: λ_{max}: 280 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

8-Azaadenosine is supplied as a solid. A stock solution may be made by dissolving the 8-azaadenosine in the solvent of choice, which should be purged with an inert gas. 8-Azaadenosine is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 8-azaadenosine in these solvents is approximately 5 and 1 mg/ml, respectively.

8-Azaadenosine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 8-azaadenosine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 8-Azaadenosine has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

8-Azaadenosine is a purine nucleoside analog and an inhibitor of adenosine deaminase acting on RNA 1 (ADAR1), an enzyme that converts adenosine to inosine in dsRNA, a post-transcriptional modification known as A-to-I editing.¹ It inhibits RNA A-to-I editing in, as well as the invasion and migration of, TPC-1 and Cal-62 thyroid cancer cells when used at concentrations of 1 and 2 μM. 8-Azaadenosine (2 mg/kg) increases the *ex vivo* secretion of IFN-γ and TNF-α from CD8⁺ T cells isolated from mouse spleen in a model of hepatitis B virus (HBV) infection.² It decreases serum levels of HBV surface antigen (HBsAg) in the same model.

References

1. Ramírez-Moya, J., Baker, A.R., Slack, F.J., *et al.* ADAR1-mediated RNA editing is a novel oncogenic process in thyroid cancer and regulates miR-200 activity. *Oncogene* **39**(18), 3738-3753 (2020).
2. Wang, L., Sun, Y., Song, X., *et al.* Hepatitis B virus evades immune recognition via RNA adenosine deaminase ADAR1-mediated viral RNA editing in hepatocytes. *Cell Mol. Immunol.* **18**(8), 1781-1882 (2021).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM