

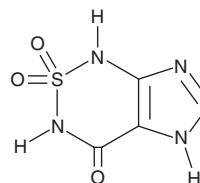
PRODUCT INFORMATION



ATIC-IN-2

Item No. 44844

CAS Registry No.: 67095-44-7
Formal Name: 1,7-dihydro-imidazo[4,5-c][1,2,6]thiadiazin-4(3H)-one, 2,2-dioxide
Synonyms: AICAR Transformylase/IMP Cyclohydrolase-IN-2, AICAR Transformylase/IMP Cyclohydrolase Inhibitor 2, ATIC Inhibitor 2
MF: $C_4H_4N_4O_3S$
FW: 188.2
Purity: $\geq 95\%$
Supplied as: A 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

ATIC-IN-2 is supplied as a solid. A stock solution may be made by dissolving the ATIC-IN-2 in the solvent of choice, which should be purged with an inert gas. ATIC-IN-2 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

ATIC-IN-2 is an inhibitor of the IMP cyclohydrolase activity of AICAR transformylase/IMP cyclohydrolase (ATIC; $K_i = 0.13 \mu\text{M}$).¹ It is selective for the IMP cyclohydrolase activity of ATIC over the AICAR transformylase activity of ATIC and over glycylamide ribonucleotide (GAR) transformylase (K_i s = $>100 \mu\text{M}$ for both). ATIC-IN-2 has also been found in *A. leucotrichus*.²

References

1. Xu, L., Chong, Y., Hwang, I., *et al.* Structure-based design, synthesis, evaluation, and crystal structures of transition state analogue inhibitors of inosine monophosphate cyclohydrolase. *J. Biol. Chem.* **282**(17), 13033-13046 (2007).
2. Djehiche, C., Benzidane, N., Djeghim, H., *et al.* Exploring the therapeutic potential of Ammodaucus leucotrichus seed extracts: A multi-faceted analysis of phytochemical composition, anti-inflammatory efficacy, predictive anti-arthritis properties, and molecular docking insights. *Pharmaceuticals (Basel)* **17**(3), 385 (2024).

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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