

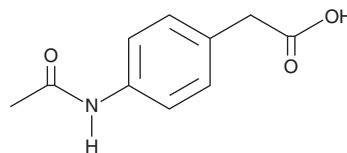
PRODUCT INFORMATION



Actarit

Item No. 20852

CAS Registry No.: 18699-02-0
Formal Name: 4-(acetylamino)-benzeneacetic acid
Synonyms: 4-Acetylamino-phenylacetic Acid, MS-932, NSC 170317
MF: C₁₀H₁₁NO₃
FW: 193.2
Purity: ≥98%
UV/Vis.: λ_{max}: 246 nm
Supplied as: A crystalline 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

Actarit is supplied as a crystalline solid. A stock solution may be made by dissolving the actarit in the solvent of choice, which should be purged with an inert gas. Actarit is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of actarit in ethanol is approximately 3 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Actarit is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, actarit should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Actarit has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Actarit is an anti-inflammatory agent.^{1,2} It inhibits carbonic anhydrase II (CAII; IC₅₀ = 422 nM).³ Actarit decreases disease severity in a mouse model of arthritis induced by type II collagen, as well as in a rat model of experimental autoimmune encephalomyelitis (EAE).^{1,2}

References

1. Fujisawa, H., Nishimura, T., Motonaga, A., *et al.* Effect of actarit on type II collagen-induced arthritis in mice. *Arznei.-Forschung* **44(1)**, 64-68 (1994).
2. Kawai, K., Kobayashi, Y., Hirayama, M., *et al.* Suppressive effects of 4-acetylamino-phenylacetic acid (actarit) on experimental autoimmune encephalomyelitis in rats. *Immunopharmacol.* **39(2)**, 127-138 (1998).
3. Ghislat, G., Rahman, T., and Ballester, P.J. Identification and validation of carbonic anhydrase II as the first target of the anti-inflammatory drug actarit. *Biomolecules* **10(11)**, 1570 (2020).

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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