

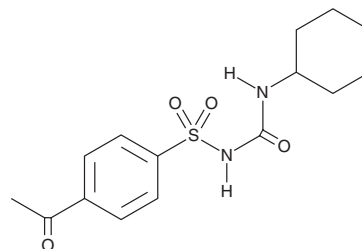
# PRODUCT INFORMATION



## Acetohexamide

Item No. 23900

**CAS Registry No.:** 968-81-0  
**Formal Name:** 4-acetyl-N-[(cyclohexylamino) carbonyl]-benzenesulfonamide  
**MF:** C<sub>15</sub>H<sub>20</sub>N<sub>2</sub>O<sub>4</sub>S  
**FW:** 324.4  
**Purity:** ≥95%  
**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

Acetohexamide is supplied as a solid. A stock solution may be made by dissolving the acetohexamide in the solvent of choice, which should be purged with an inert gas. Acetohexamide is slightly soluble in DMSO.

### Description

Acetohexamide is a first generation sulfonylurea that inhibits sulfonylurea receptor 1 (SUR1) linked to the inwardly rectifying potassium channel (K<sub>IR</sub>6.2) with K<sub>i</sub> values of 22.9 and 14.2 μM in HEK293 cells transfected with the human receptor and in rat brain, respectively.<sup>1</sup> It is metabolized to the hypoglycemic compound L-hydroxyhexamide *in vivo*.<sup>2,3</sup> Formulations containing acetohexamide have previously been used in the treatment of type 2 diabetes.

### References

1. Gopalakrishnan, M., Molinari, E.J., Char-Change, S., *et al.* Pharmacology of human sulphonylurea receptor SUR1 and inward rectifier K<sup>+</sup> channel Kir6.2 combination expressed in HEK-293 cells. *Br. J. Pharmacol.* **129(7)**, 1323-1332 (2000).
2. McMahon, R.E., Marshall, F.J., and Culp, H.W. The nature of the metabolites of acetohexamide in the rat and in the human. *J. Pharmacol. Exp. Ther.* **149(2)**, 272-279 (1965).
3. Imamura, Y., Sanai, K., Seri, K., *et al.* Hypoglycemic effect of S(-)-hydroxyhexamide, a major metabolite of acetohexamide, and its enantiomer R(+)-hydroxyhexamide. *Life Sci.* **69(16)**, 1947-1955 (2001).

#### 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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