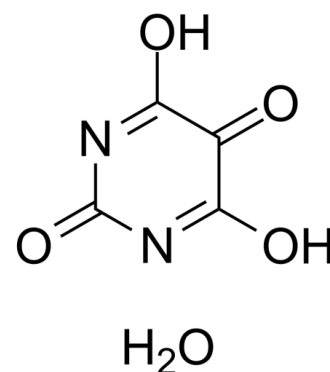


Data Sheet

Product Name:	Alloxan (hydrate)
Cat. No.:	CS-W017943
CAS No.:	2244-11-3
Molecular Formula:	C ₄ H ₄ N ₂ O ₅
Molecular Weight:	160.08
Target:	Proteasome
Pathway:	Metabolic Enzyme/Protease
Solubility:	10 mM in DMSO



BIOLOGICAL ACTIVITY:

Alloxan hydrate is a diabetogenic agent to induce diabetes. Alloxan hydrate is a **proteasome** inhibitor. Alloxan causes diabetes in experimental animals through its ability to destroy the insulin-secreting B-cells of the pancreas^{[1][2]}. **In Vitro:** Alloxan hydrate inhibits the peptidase activities of the purified 26S and 20S proteasomes^[1].

References:

[1]. Zhou W, et al. Diabetogenic agent alloxan is a proteasome inhibitor. *Biochem Biophys Res Commun.* 2017;488(2):400-406.

[2]. Munday R, et al. The relationship between the physicochemical properties and the biological effects of alloxan and several N-alkyl substituted alloxan derivatives. *J Endocrinol.* 1993;139(1):153-163.

CAIndexNames:

2,4,5,6(1H,3H)-Pyrimidinetetrone, hydrate (1:1)

SMILES:

O=C(C(O)=N1)C(O)=NC1=O.O

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

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