

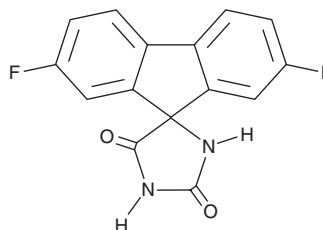
# PRODUCT INFORMATION



## Imirestat

Item No. 41829

**CAS Registry No.:** 89391-50-4  
**Formal Name:** 2,7-difluoro-spiro[9H-fluorene-9,4'-imidazolidine]-2',5'-dione  
**Synonyms:** AL 01576, Alcon 1576, HOE 843  
**MF:** C<sub>15</sub>H<sub>8</sub>F<sub>2</sub>N<sub>2</sub>O<sub>2</sub>  
**FW:** 286.2  
**Purity:** ≥98%  
**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

Imirestat is supplied as a solid. A stock solution may be made by dissolving the imirestat in the solvent of choice, which should be purged with an inert gas. Imirestat is soluble (≥10 mg/ml) in DMSO.

### Description

Imirestat is an inhibitor of aldose reductase (IC<sub>50</sub>s = 24 and 18 nM for the rat and human enzymes, respectively).<sup>1</sup> It reduces periodontal bone loss in a rat model of *P. gingivalis* LPS-induced periodontal inflammation and bone reabsorption when administered in the diet at 0.0125% (w/w).<sup>2</sup> Dietary administration of imirestat (0.0125% w/w) decreases the incidence and severity of cataracts in a rat model of streptozotocin-induced diabetes.<sup>3</sup>

### References

1. Griffin, B.W., McNatt, L.G., Chandler, M.L., *et al.* Effects of two new aldose reductase inhibitors, AL-1567 and AL-1576, in diabetic rats. *Metabolism* **36(5)**, 486-490 (1987).
2. Kador, P.F., O'Meara, J.D., Blessing, K., *et al.* Efficacy of structurally diverse aldose reductase inhibitors on experimental periodontitis in rats. *J. Periodontol.* **82(6)**, 926-933 (2011).
3. Kador, P.F., Lee, J.W., Fujisawa, S., *et al.* Relative importance of aldose reductase versus nonenzymatic glycosylation on sugar cataract formation in diabetic rats. *J. Ocul. Pharmacol. Ther.* **16(2)**, 149-160 (2000).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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