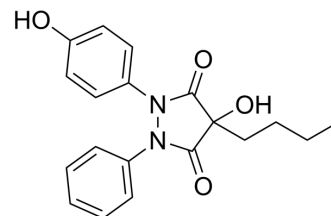


## 4-Hydroxyoxyphenbutazone

Cat. No.:	HY-108050
CAS No.:	55648-39-0
Molecular Formula:	C <sub>19</sub> H <sub>20</sub> N <sub>2</sub> O <sub>4</sub>
Molecular Weight:	340.37
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	4-Hydroxyoxyphenbutazone kills both replicating and nonreplicating (NR) <i>Mycobacterium tuberculosis</i> (Mtb), including Mtb resistant to standard agents. 4-Hydroxyoxyphenbutazone is a potent inhibitor of cytokine production. 4-Hydroxyoxyphenbutazone is an immunosuppressive agent and has the potential for rheumatoid arthritis research <sup>[1][2]</sup> .
<b>In Vitro</b>	4-Hydroxyoxyphenbutazone kills R Mtb in liquid culture with an MIC of 100 μM in the presence of 0.5% BSA and an MIC of 25 μM at lower BSA concentrations. The bactericidal spectrum of 4-Hydroxyoxyphenbutazone is remarkably narrow, with weak activity against <i>Mycobacterium smegmatis</i> (MIC of 200 μM in 7H9 lacking BSA). 4-Hydroxyoxyphenbutazone was inactive on <i>E. coli</i> , <i>S. enterica</i> var <sup>[1]</sup> . 4-Hydroxyoxyphenbutazone efficiently inhibits both monokines and Th1 and Th2 lymphokines in peripheral mononuclear cells (PBMC) <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Ben Gold, et al. Nonsteroidal anti-inflammatory drug sensitizes *Mycobacterium tuberculosis* to endogenous and exogenous antimicrobials.
- [2]. Anja Ten Brinke, et al. 4-Hydroxy-oxyphenbutazone is a potent inhibitor of cytokine production. *Eur Cytokine Netw.* 2005 Jun;16(2):144-51.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA