



Data Sheet

Product Name: Zearalenone
Cat. No.: CS-0027914
CAS No.: 17924-92-4
Molecular Formula: C18H22O5
Molecular Weight: 318.36
Target: Others
Pathway: Others

Solubility: DMSO: 125 mg/mL (392.64 mM; Need ultrasonic)

BIOLOGICAL ACTIVITY:

Zearalenone is a mycotoxin produced mainly by fungi belonging to the genus Fusarium in foods and feeds. Possess oestrogenic activity in pigs, cattle and sheep, with low acute toxicity. Causes precocious development of mammae and other estrogenic effects in young gilts^{[1][2]}. **In Vivo:** Zearalenone is frequently implicated in reproductive disorders of farm animals and occasionally in hyperoestrogenic syndromes in humans. There is evidence that ZEA and its metabolites possess oestrogenic activity in pigs, cattle and sheep. However, ZEA is of a relatively low acute toxicity after oral or interperitoneal administration in mice, rat and pig^[1].

References:

- [1]. Zinedine A, et al. Review on the toxicity, occurrence, metabolism, detoxification, regulations and intake of zearalenone: an oestrogenic mycotoxin. Food Chem Toxicol. 2007 Jan;45(1):1-18.
- [2]. Richard JL, et al. Some major mycotoxins and their mycotoxicoses--an overview. Int J Food Microbiol. 2007 Oct 20;119(1-2):3-10.

CAIndexNames:

 $1 \\H-2-Benzoxacyclotetradecin-1, \\7 (8 \\H)-dione, \\3,4,5,6,9,10-hexahydro-14,16-dihydroxy-3-methyl-, \\(3 \\S,11 \\E)-dione, \\3,4,5,6,9,10-hexahydro-14,16-dihydroxy-3-methyl-, \\(3 \\S,11 \\E)-dione, \\3,4,5,6,9,10-hexahydro-14,16-dihydroxy-3-methyl-, \\(3 \\S,11 \\E)-dione, \\(3 \\S,11 \\E)-$

SMILES:

O=C(O[C@@H](C)CCC1)C2=C(O)C=C(O)C=C2/C=C/CCCC1=O

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

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