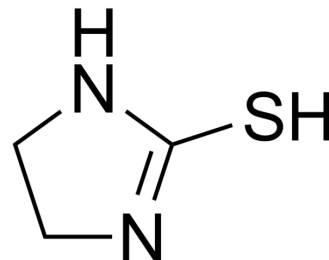


Ethylenethiourea

Cat. No.:	HY-W010593		
CAS No.:	96-45-7		
Molecular Formula:	C ₃ H ₆ N ₂ S		
Molecular Weight:	102.16		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Ethylenethiourea is a degradation product of the ethylenebisthiocarbamate group of fungicides. Ethylenethiourea is tumorigenic and teratogenic. Ethylenethiourea is orally active ^{[1][2]} .
In Vitro	Ethylenethiourea is stable at elevated temperature over a wide pH range ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Ethylenethiourea (10-80 mg/kg; p.o.) is teratogenic in rats ^[1] . Ethylenethiourea (5-500 ppm; in the diet; 12 month) induces thyroid carcinomas in rats ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	Virgin Wistar female rats ^[1]
Dosage:	0, 5, 10, 20, 40 or 80 mg/kg
Administration:	Oral administration, from 21-42 days before conception to pregnancy day 15, and on days 6-15 or 7-20 of pregnancy
Result:	Induced meningoencephalocoele, meningorrhagia, meningorrhoea, hydrocephalus, obliterated neural canal, abnormal pelvic limb posture with equinovarus, and short or kinky tail after 10 mg/kg or more.

REFERENCES

[1]. Khera KS. Ethylenethiourea: teratogenicity study in rats and rabbits. *Teratology*. 1973 Jun;7(3):243-52.

[2]. Graham SL, et al. Effects of one-year administration of ethylenethiourea upon the thyroid of the rat. *J Agric Food Chem*. 1973 May-Jun;21(3):324-9.

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

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