

# Methimazole

Catalog No: tcsc2149



## Available Sizes

Size: 1g

Size: 5g



## Specifications

**CAS No:**

60-56-0

**Formula:**

$C_4H_6N_2S$

**Pathway:**

Others

**Target:**

Others

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O : ≥ 50 mg/mL (437.94 mM); DMSO : ≥ 100 mg/mL (875.89 mM)

**Observed Molecular Weight:**

114.17

## Product Description

Methimazole(Tapazole, Northyx) is an antithyroid medicine.

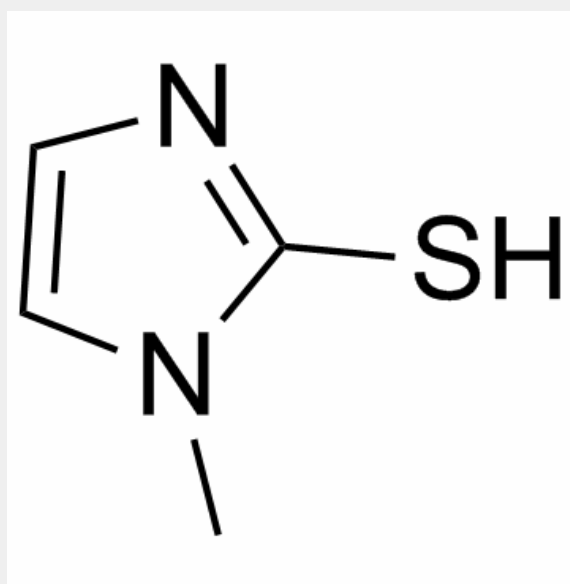
Target: Others

Methimazole is an antithyroid drug, and part of the thioamide group. Like its counterpart propylthiouracil, a major side effect of treatment is agranulocytosis. Methimazole is a drug used to treat hyperthyroidism, a condition that occurs when the thyroid gland

begins to produce an excess of thyroid hormone. The drug may also be taken before thyroid surgery to lower thyroid hormone levels and minimize the effects of thyroid manipulation. Additionally, Methimazole is used in the veterinary setting to treat hyperthyroidism in cats.

Methimazole inhibits the enzyme thyroperoxidase, which normally acts in thyroid hormone synthesis by oxidizing the anion iodide (I<sup>-</sup>) to iodine (I<sub>0</sub>), facilitating iodine's addition to tyrosine residues on the hormone precursor thyroglobulin, a necessary step in the synthesis of triiodothyronine (T<sub>3</sub>) and thyroxine. It does not inhibit the action of the sodium-dependent iodide transporter located on follicular cells' basolateral membranes. Inhibition of this step requires competitive inhibitors such as perchlorate and thiocyanate.

It acts at CXCL10.



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