

# 1-Aminobenzotriazole

Catalog No: tcsc0027797



## Available Sizes

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg



## Specifications

**CAS No:**

1614-12-6

**Formula:**

$C_6H_6N_4$

**Pathway:**

Metabolic Enzyme/Protease

**Target:**

Cytochrome P450

**Purity / Grade:**

>98%

**Solubility:**

H2O : 50 mg/mL (372.74 mM; Need ultrasonic)

**Alternative Names:**

ABT;3-Aminobenzotriazole

**Observed Molecular Weight:**

134.14

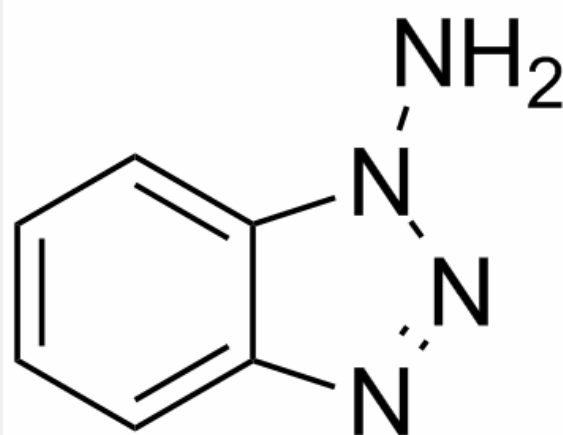
## Product Description

1-Aminobenzotriazole is a nonspecific and irreversible inhibitor of **cytochrome P450 (P450)**.

IC50 & Target: P450<sup>[1]</sup>

**In Vitro:** 1-Aminobenzotriazole (ABT) alone significantly increases the expression levels of CYP2B6 in two different hepatocytes (7.3- and 10.8-fold, respectively). Upon co-treatment with 1-Aminobenzotriazole, the induction of CYP2B6 expression by CITCO or rifampin is potentiated: 12.6- and 4.0-fold for CITCO as well as 3.9- and 2.5-fold for rifampin. 1-Aminobenzotriazole has a greater potentiation effect on CITCO than on rifampin. 1-Aminobenzotriazole alone increases the expression levels of CYP3A4 in two different hepatocytes (by 2.0- and 3.8-fold). Upon co-treatment with 1-Aminobenzotriazole, the effects of CITCO on CYP3A4 expression levels are potentiated by 3.8- and 6.0- fold as compared to cells treated with CITCO alone<sup>[1]</sup>. 1-Aminobenzotriazole (ABT) (1 mM) shows pronounced (~95%) inhibition of the formation of N-acetylprocainamide compared with the control without 1-Aminobenzotriazole<sup>[2]</sup>.

**In Vivo:** Oral 1-Aminobenzotriazole (ABT) (100 mg/kg, 2 h predose) decreases the clearance of intravenous procainamide (45%) in rats, accompanied by a decreased N-acetylprocainamide-to-procainamide ratio in urine (0.74 versus 0.21) and plasma (area under the curve ratio 0.59 versus 0.11). The urinary recovery of procainamide increases from 18 to 30%, whereas the recovery of N-acetylprocainamide in urine decreases from 13.3 to 6.5% with 1-Aminobenzotriazole<sup>[2]</sup>. Pretreatment of rats with 100 mg/kg oral 1-Aminobenzotriazole (ABT) administered 2 hours before a semisolid caloric test meal markedly delays gastric emptying. 1-Aminobenzotriazole also increases stomach weights by 2-fold<sup>[3]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!