

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

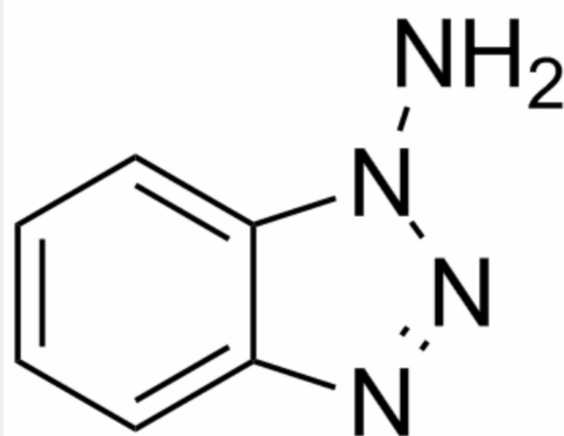
Product Description

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

IC50 & Target: P450^[1]

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^[1]. 1-Aminobenzotriazole (ABT) (1 mM) shows pronounced (~95%) inhibition of the formation of N-acetylprocainamide compared with the control without 1-Aminobenzotriazole^[2].

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^[2]. 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^[3].



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