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## Product Data Sheet

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Product Name: AS057278

Cat. No.: GC64909

### Chemical Properties

Cas. No. 402-61-9

Formula C<sub>5</sub>H<sub>6</sub>N<sub>2</sub>O<sub>2</sub>

M.Wt 126.11

Solubility DMSO :  $\geq$  100 mg/mL (792.96 mM)

Storage Store at -20°C

**General tips** For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

**Shipping Condition** Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

### Background

AS057278 (3-Methylpyrazole-5-carboxylic acid, MPC) is an inhibitor of D-amino acid oxidase (DAAO).

No inhibitory effect on DASOX were observed with AS057278 at the concentration of 10  $\mu$ M and no inhibitory effect on serine racemase were observed with AS057278 at the concentration of 50  $\mu$ M[2].

MPC is able to increase brain d-serine levels and ameliorate PCP-induced abnormal behavior in SD rat[1]. MPC increases D-serine fraction in rat cortex and midbrain (10 mg/kg i.v.). AS057278 was able to normalize phencyclidine (PCP)-induced prepulse inhibition after acute (80 mg/kg) and chronic (20 mg/kg b.i.d.) oral administration in mice. AS057278 after oral chronic treatment (10 mg/kg b.i.d.) was able to normalize PCP-induced hyperlocomotion[2].

[1] Haruta N, et al. Proc Jpn Acad Ser B Phys Biol Sci. 2011, 87(10):641-8. [2] Adage T, et al. Eur Neuropsychopharmacol. 2008, 18(3):200-14.

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

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