

# Diaveridine

**Catalog No: tcsc0013961**



## Available Sizes

**Size:** 250mg

**Size:** 1g

**Size:** 5g



## Specifications

**CAS No:**

5355-16-8

**Formula:**

$C_{13}H_{16}N_4O_2$

**Pathway:**

Cell Cycle/DNA Damage;Anti-infection

**Target:**

Antifolate;Bacterial

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 32 mg/mL (122.94 mM; Need ultrasonic)

**Alternative Names:**

EGIS-5645

**Observed Molecular Weight:**

260.29

## Product Description

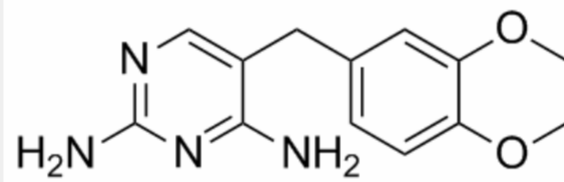
Diaveridine (EGIS-5645) is a **dihydrofolate reductase (DHFR)** inhibitor with a  $K_i$  of 11.5 nM for the wild type DHFR and also an antibacterial agent.

IC50 & Target:  $K_i$ : 11.5 nM (DHFR) <sup>[1]</sup>

Bacterial<sup>[2]</sup>

**In Vitro:** Diaveridine is a dihydrofolate reductase (DHFR) inhibitor with a  $K_i$  of 11.5 nM for the wild type DHFR and also an antibacterial agent<sup>[1]</sup>. Treatments with Diaveridine for 90 min have a strong bactericidal effect on *S. typhimurium* TA1535, and no bacterial growth is observed at 10µg/mL or more. Without metabolic activation, treatment with Diaveridine for 48 h, but not 24 h, causes a dose-dependent, significant increase in the frequency of aberrant metaphases. At 100 µg/mL, 60% of the metaphases contain chromosome aberrations<sup>[2]</sup>.

**In Vivo:** The sperm abnormality of the Diaveridine (DVD) treatment groups at all dose levels (Diaveridine, 128 to 512 mg/kg) shows no significant differences compare with the negative control group. There are no significant differences of micronucleus between the negative control group and the Diaveridine treatment groups (Diaveridine, 128 to 512 mg/kg). The chromosome aberration of the Diaveridine treatment groups at all dose levels and the negative control group are significantly lower than those in the positive control group treated with cyclophosphamide (P[3]).



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