

Data Sheet

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Product Name:PyrimethamineCat. No.:PC-45409CAS No.:58-14-0Molecular Formula: $C_{12}H_{13}CIN_4$ Molecular Weight:248.7114Target:Parasite

Solubility : 10 mM in DMSO

Biological Activity

Pyrimethamine (Pirimetamin, RP 4753) is a synthetic derivative of ethyl-pyrimidine with potent antimalarial properties, interferes with the regeneration of tetrahydrofolic acid from dihydrofolate by competitively inhibiting **DHFR**, also is a potent **NRF2** inhibitor.

Pyrimethamine has also been found to reduce the expression of SOD1.

Pyrimethamine also is a potent **NRF2** inhibitor with IC50 of 1.23 uM, reduces NRF2 half-life by promoting NRF2 ubiquitination and degradation in KYSE70 and KYSE180 cells.

References

Lange DJ, et al. Amyotroph Lateral Scler Frontotemporal Degener. 2013 Apr;14(3):199-204.

Wright PD, et al. Neurosci Lett. 2010 Oct 4;482(3):188-92.

Martins-Duarte ÉS, et al. Exp Parasitol. 2013 Mar;133(3):294-9.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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