

AZD5904, Myeloperoxidase inhibitor

Catalog	Unit
TBI4058-5MG	5 mg
TBI4058-25MG	25 mg

Product Details

Formal Name: 3-[[[(2R)-Oxolan-2-yl]methyl]-2-sulfanylidene-7H-purin-6-one]; 3-[[[(2R)-Tetrahydrofuran-2-yl]methyl]-2-thioxo-7H-purin-6-one

Alternate Names: TX4

Molecular Formula: C₁₀H₁₂N₄O₂S

Formula Weight: 252.30

CAS Number: 618913-30-7

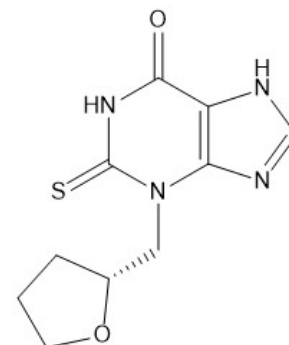
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to at least 25 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

Myeloperoxidase inhibitor

Functions

A mechanism-based inactivator of myeloperoxidase (IC₅₀ = 200 nM), reacting with hydrogen peroxide in neutrophils to inactivate the enzyme. This prevents production of hypochlorous acid and concomitant oxidative stress. Importantly, neutrophil bactericidal activity was slowed but not stopped. AZD5904 did not inactivate thyroid peroxidase or lactoperoxidase. AZD5904 prevented the onset and reversed established high-fat diet induced microvascular insulin resistance. It also alleviated the relaxation defect in hypertrophic induced pluripotent cardiomyocytes via restoration of MYBPC3 phosphorylation, suggesting potential therapeutic value in treating hypertrophic cardiomyopathy.

Application Procedures

First dissolved in DMSO (up to at least 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.