

Sulfasalazine, Anti-inflammatory / antibiotic

Catalog	Unit
TBI4566-250MG	250 mg
TBI4566-1G	1 g

Product Details

Formal Name: 2-Hydroxy-5-{{4-[(2-pyridinylamino)sulfonyl]phenyl}azo}benzoic acid

Molecular Formula: C₁₈H₁₄N₄O₅S

Formula Weight: 398.39

CAS Number: 599-79-1

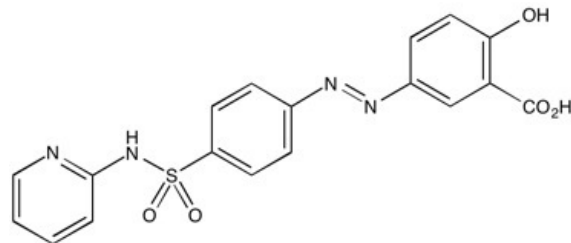
Purity: >98%

Formulation: powder

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

Storage: RT

Stability: ≥ 2 years.



Applications

Anti-inflammatory / antibiotic

Functions

Sulfasalazine is an approved drug with diverse potential applications. Clinically useful agent for the treatment of colitis and ileocolitis. It is metabolized by intestinal bacteria to release the anti-inflammatory agent 5-aminosalicylic acid and the antibacterial agent sulfapyridine. It has also been found to be a specific inhibitor of NFκB (IC₅₀ = 500 μM), inhibitor of IL-2 production of activated T lymphocytes and, TNFα and IL-1 synthesis in macrophages. Sulfasalazine has more recently been shown to be inhibitor of the system Xc⁻ cystine-glutamate antiporter. It was able to block cystine uptake causing depletion of glutathione resulting in compromised cellular redox defense and ultimately cessation of tumor growth. It has been studied for the treatment of breast, pancreatic, lymphoma, brain and other cancers.

Application Procedures

First dissolved in DMSO (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20° for up to 2 months.

For research use only.