# PRODUCT INFORMATION



## Olsalazine (sodium salt)

Item No. 23661

CAS Registry No.: 6054-98-4

Formal Name: 3,3'-(1,2-diazenediyl)bis[6-hydroxy-

benzoic acid, disodium salt

Synonym: C.I. 14130

MF:  $C_{14}H_8N_2O_6 \bullet 2Na$ 

FW: 346.2 **Purity:** ≥98%

 $\lambda_{max}$ : 219, 253, 362 nm UV/Vis.:

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## **Laboratory Procedures**

Olsalazine (sodium salt) is supplied as a crystalline solid. Aqueous solutions of olsalazine (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of olsalazine (sodium salt) in PBS (pH 7.2) is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Olsalazine is an orally bioavailable prodrug form of the anti-inflammatory agent 5-aminosalicylic acid (5-ASA; Item No. 70265) that is cleaved by bacterial azo reductases in the gut to generate active 5-ASA.<sup>1</sup> In vitro, olsalazine increases ion transport in isolated rabbit distal ileum when applied to the luminal side  $(ED_{50} = 0.3 \text{ mM})$  and stimulates fluid transport in rat jejunum when used at a concentration of 5 mM.<sup>2,3</sup> Olsalazine (150 mg/kg for 8 days) improves stool consistency and decreases occult and gross bleeding as well as myeloperoxidase (MPO) activity and leukotriene B<sub>4</sub> (LTB<sub>4</sub>; Item No. 20110) levels in colon tissue in a mouse model of acute colitis induced by dextran sulfate (Item No. 23250).5 Olsalazine also inhibits bovine xanthine oxidase in vitro (IC50 = 3.4 mg/L) and lowers serum uric acid levels in a mouse model of hyperuricemia induced by oxonic acid (Item No. 22586) when administered at a dose of 20 mg/kg.5 Formulations containing olsalazine have been used in the treatment of inflammatory bowel disease (IBD) and ulcerative colitis.

#### References

- 1. Nugent, S.G., Kumar, D., Rampton, D.S., et al. Gut 48(4), 571-577 (2001).
- 2. Pamukcu, R., Hanauer, S.B., and Chang, E.B. Gastroenterology 95(4), 975-981 (1988).
- 3. Mohsen, A.Q.M., Mulvey, D., Priddle, J.D., et al. Gut 28(3), 346-352 (1987).
- 4. Murthy, S., Murthy, N.S., Coppola, D., et al. Inflamm. Res. 46(6), 224-233 (1997).
- 5. Niu, Y., Li, H., Gao, L., et al. J. Pharmacol. Sci. 135(3), 114-120 (2017).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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• 2Na+

OH

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