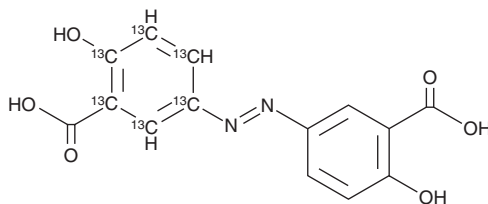


PRODUCT INFORMATION

Olsalazine-¹³C₆ Item No. 33798

Formal Name: (E)-5-((3-carboxy-4-hydroxyphenyl) diazenyl)-2-hydroxybenzoic-1,2,3,4,5,6-¹³C₆ acid
MF: C₈[¹³C]₆H₁₀N₂O₆
FW: 308.2
Purity: ≥98%
Supplied as: A 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-¹³C₆ is supplied as a solid. A stock solution may be made by dissolving the olsalazine-¹³C₆ in the solvent of choice, which should be purged with an inert gas. Olsalazine-¹³C₆ is soluble in methanol and DMSO.

Description

Olsalazine-¹³C₆ is intended for use as an internal standard for the quantification of olsalazine (Item No. 23661) by GC- or LC-MS. 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.¹ *In vitro*, olsalazine increases ion transport in isolated rabbit distal ileum when applied to the luminal side (ED₅₀ = 0.3 mM) and stimulates fluid transport in rat jejunum when used at a concentration of 5 mM.^{2,3} Olsalazine (150 mg/kg for 8 days) improves stool consistency and decreases occult and gross bleeding as well as myeloperoxidase (MPO) activity and leukotriene B₄ (LTB₄; Item No. 20110) levels in colon tissue in a mouse model of acute colitis induced by dextran sulfate (Item No. 23250).⁴ 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.* Intestinal luminal pH in inflammatory bowel disease: Possible determinants and implications for therapy with aminosalicylates and other drugs. *Gut* **48**(4), 571-577 (2001).
2. Pamukcu, R., Hanauer, S.B., and Chang, E.B. Effect of disodium azodisalicylate on electrolyte transport in rabbit ileum and colon in vitro. Comparison with sulfasalazine and 5-aminosalicylic acid. *Gastroenterology* **95**(4), 975-981 (1988).
3. Mohsen, A.Q.M., Mulvey, D., Priddle, J.D., *et al.* Effects of olsalazine in the jejunum of the rat. *Gut* **28**(3), 346-352 (1987).
4. Murthy, S., Murthy, N.S., Coppola, D., *et al.* The efficacy of BAY y 1015 in dextran sulfate model of mouse colitis. *Inflamm. Res.* **46**(6), 224-233 (1997).
5. Niu, Y., Li, H., Gao, L., *et al.* Old drug, new indication: Olsalazine sodium reduced serum uric acid levels in mice *via* inhibiting xanthine oxidoreductase activity. *J. Pharmacol. Sci.* **135**(3), 114-120 (2017).

WARNING

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

SAFETY DATA

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM