

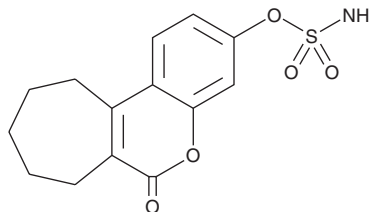
# PRODUCT INFORMATION



## STX-64

Item No. 9003206

**CAS Registry No.:** 288628-05-7  
**Formal Name:** sulfamic acid, 6,7,8,9,10,11-hexahydro-6-oxobenzo[b]cyclohepta[d]pyran-3-yl ester  
**Synonyms:** BN83495, 667 Coumate, Irosustat  
**MF:** C<sub>14</sub>H<sub>15</sub>NO<sub>5</sub>S  
**FW:** 309.3  
**Purity:** ≥95%  
**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

STX-64 is supplied as a solid. A stock solution may be made by dissolving the STX-64 in the solvent of choice, which should be purged with an inert gas. STX-64 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of STX-64 in these solvents is approximately 20 and 30 mg/ml, respectively.

### Description

STX-64 is a steroid sulfatase inhibitor (IC<sub>50</sub> = 0.008 μM in placental microsomes).<sup>1</sup> It also inhibits carbonic anhydrase II (CAII; IC<sub>50</sub> = 0.025 μM).<sup>2</sup> STX-64 inhibits LPS-induced production of nitric oxide (NO) and prostaglandin E<sub>2</sub> (PGE<sub>2</sub>; Item No. 14010) in RAW 264.7 macrophages (IC<sub>50</sub>s = 85.76 and 0.081 μM, respectively).<sup>3</sup> It reduces rat liver steroid sulfatase activity when administered at a dose of 1 mg/kg.<sup>1</sup> STX-64 (2 mg/kg) inhibits estrone sulfate-induced uterine growth and reduces the growth of N-nitroso-N-methylurea-induced, estrone sulfate-maintained mammary tumors in ovariectomized rats.<sup>4</sup>

### References

1. Malini, B., Purohit, A., Ganeshapillai, D., *et al.* Inhibition of steroid sulphatase activity by tricyclic coumarin sulphamates. *J. Steroid Biochem. Mol. Biol.* **75**(4-5), 253-258 (2000).
2. Ho, Y.T., Purohit, A., Vicker, N., *et al.* Inhibition of carbonic anhydrase II by steroidal and non-steroidal sulphamates. *Biochem. Biophys. Res. Commun.* **305**(4), 909-914 (2003).
3. Jang, H.-L., El-Gamal, M.I., Choi, H.-E., *et al.* Synthesis of tricyclic fused coumarin sulfonates and their inhibitory effects on LPS-induced nitric oxide and PGE<sub>2</sub> productions in RAW 264.7 macrophages. *Bioorg. Med. Chem. Lett.* **24**(2), 571-575 (2014).
4. Purohit, A., Woo, L.W., Potter, B.V., *et al.* *In vivo* inhibition of estrone sulfatase activity and growth of nitrosomethylurea-induced mammary tumors by 667 COUMATE. *Cancer Res.* **60**(13), 3394-3396 (2000).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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