**Product Information**

### (S)-Lisofylline

**Catalog No.**: 13617

CAS Registry No.: 100324-80-9  
Formal Name: 3,7-dihydro-1-[5S-hydroxyhexyl]-3,7-dimethyl-1H-purine-2,6-dione  
Synonym: (+)-Lisofylline, (S)-LSF  
MF: C_{11}H_{20}N_{2}O_{3}  
FW: 280.3  
Purity: ≥98%  
Stability: ≥2 years at -20°C  
Supplied as: A crystalline solid

**Laboratory Procedures**

For long term storage, we suggest that (S)-lisofylline ((S)-LSF) be stored as supplied at -20°C. It should be stable for at least two years.

(S)-LSF is supplied as a crystalline solid. A stock solution may be made by dissolving the (S)-LSF in the solvent of choice. (S)-LSF is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of (S)-LSF in these solvents is approximately 15, 3, and 12 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of (S)-LSF can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of (S)-LSF in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

LSF, a chiral metabolite of pentoxifylline, acts as a potent anti-inflammatory agent. (S)-LSF is the pharmacologically inactive optical enantiomer of (R)-LSF, the biologically active isomer. When metabolized by isolated human liver cells, pentoxifylline is exclusively reduced to (S)-LSF in the cytosol, while reduction in liver microsomes is 85% stereoselective in favor of (S)-LSF formation. Thus, pentoxifylline is an inefficient prodrug for the delivery of therapeutically relevant LSF.

**References**


**Related Products**

(R)-Lisofylline - Cat. No. 13616  
(+)-Lisofylline - Cat. No. 10010785

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**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

**MATERIAL SAFETY DATA**

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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