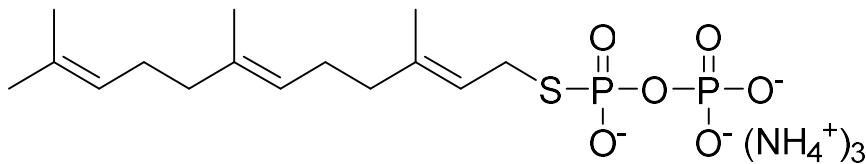


# Farnesyl S-thiolodiphosphate (FSPP)

**Catalog number:** I-S150

**Molecular Formula:** C<sub>15</sub>H<sub>37</sub>N<sub>3</sub>O<sub>6</sub>P<sub>2</sub>S



**MW:** 449.48

**CAS#:** 373597-45-6

**Solubility:** water or methanol, >1 mg/mL

**Storage and Handling:** Store dry at -20 °C. Stock solutions should be stored frozen (-20 °C or below).

**Background:** Farnesyl thiolodiphosphate (FSPP) is an analog of FPP in which the non-bridging oxygen has been replaced by sulfur resulting in a less-reactive compound.

**References:** 1) Phan, R. M. and C. D. Poulter (2001). "Synthesis of (S)-Isoprenoid Thiodiphosphates as Substrates and Inhibitors." *The Journal of Organic Chemistry* 66(20): 6705.

2) Hast, M. A., C. B. Nichols, et al. (2011). "Structures of Cryptococcus neoformans Protein Farnesyltransferase Reveal Strategies for Developing Inhibitors That Target Fungal Pathogens." *Journal of Biological Chemistry* 286(40): 35149-35162.

3) Lee, L. V., B. Granda, et al. (2010). "Biophysical Investigation of the Mode of Inhibition of Tetramic Acids, the Allosteric Inhibitors of Undecaprenyl Pyrophosphate Synthase." *Biochemistry* 49(25): 5366.

4) Zhang, Y., FY Lin, et al. (2012) "HIV-1 Integrase Inhibitor-Inspired Antibacterials Targeting Isoprenoid Biosynthesis" *ACS Me. Chem. Lett* 3(5): 402-406.

5) Kirby, J, K.L. Dietzen, et al. (2016) "Engineering a functional 1-deoxy-D-xylulose 5-phosphate (DXP) pathway in *Saccharomyces cerevisiae*" 38: 494-503.

**Hazardous Properties and Cautions:** The toxicological and pharmacological properties of this compound are not fully known. For further information see the MSDS on request. This product is manufactured and shipped only in small quantities, intended for research and development in a laboratory utilizing prudent procedures for handling chemicals of unknown toxicity, under the supervision of persons technically qualified to evaluate potential risks and authorized to enforce appropriate health and safety measures. As with all research chemicals, precautions should be taken to avoid unnecessary exposures or risks.

**Warranty and Disclaimer:** Echelon warrants the product conforms to the specifications stated herein. In the event of nonconformity, Echelon will replace products or refund purchase price, at its sole option, and Echelon shall not be responsible for any other loss or damage, whether known or foreseeable to Echelon. No other warranties apply, express or implied, including but not limited to warranty of fitness for any purpose or implied warranty of merchantability. Purchaser is solely responsible for all consequences of its use of the product and Echelon assumes no responsibility therefore, including success of purchaser's research and development, or health or safety of any uses of the product.

Technical Data Sheet, Rev 6, 5/7/24– **For research use only.** Not intended for diagnostic or therapeutic use.

