PRODUCT INFORMATION



Fudosteine

Item No. 16722

CAS Registry No.: 13189-98-5

S-(3-hydroxypropyl)-L-cysteine Formal Name:

Synonym: SS320A MF: $C_6H_{13}NO_3S$ FW: 179.2 **Purity:** ≥95%

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

Fudosteine is supplied as a crystalline solid. Aqueous solutions of fudosteine can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of fudosteine in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Fudosteine is a cysteine derivative that interferes with the increase in goblet cell number, expression of the mucin MUC5AC, and subsequent mucin secretion, in airways agonized with tobacco smoke, isoproterenol, lipopolysaccharide, TNF- α , or oxidants. ¹⁻³ Fudosteine, which is a thiol compound with antioxidant properties, limits NF-κB signaling and reduces inflammatory gene expression.³ It has greater bioavailability than N-acetyl-cysteine and increases cysteine levels in cells.³

References

- 1. Takahashi, K., Mizuno, H., Ohno, H., et al. Effects of SS320A, a new cysteine derivative, on the change in the number of goblet cells induced by isoproterenol in rat tracheal epithelium. Jpn. J. Pharmacol. 77(1), 71-77 (1998).
- 2. Rhee, C.K., Kang, C.M., You, M.B., et al. Effect of fudosteine on mucin production. Eur. Respir. J. 32(5), 1195-1202 (2008).
- 3. Rahman, I. Pharmacological antioxidant strategies as therapeutic interventions for COPD. Biochim. Biophys. Acta 1822(5), 714-728 (2012).

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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