

3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

FLUPROSTENOL ISOPROPYL ESTER

Product Number F 2427

CAS #: 157283-68-6

Synonyms: (Z)-7-[(1R,2R,3R,5S)-3,5-Dihydroxy-2-[(1E,3R)-3-hydroxy-4-[(α , α , α -trifluoro-m-isopropyltolyl)oxy]-1-butenyl]cyclopentyl]-5-heptenoate

Chemical Formula: C₂₆H₃₅F₃O₆

Formula Weight: 500.6

Product Description

Fluprostenol isopropyl ester is an F-series prostaglandin analog. This compound is a prodrug which is converted by esterase activity *in vivo* to yield the free acid fluprostenol, a potent and selective $PGF2\alpha$ receptor (FP receptor) agonist.

Reagent

Fluprostenol isopropyl ester is supplied as a solution in ethanol.

Precautions and Disclaimer

This product is for laboratory use only. It is not intended or approved for use in humans or for veterinary use. Please consult the Material Data Safety Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To change the solvent, evaporate the ethanol under a gentle stream of nitrogen, and add the solvent of choice (e.g., DMSO or DMF). Fluprostenol isopropyl ester is soluble in either DMSO or DMF to at least 20 mg/ml.

Fluprostenol isopropyl ester has very low solubility in aqueous buffers. For maximum solubility in aqueous buffers, fluprostenol isopropyl ester should first be dissolved in DMSO and then diluted in the aqueous buffer of choice. Fluprostenol isopropyl ester is soluble to 500 μ g/ml in a 1:1 solution of DMF/PBS (pH 7.2) using this method. Aqueous solutions should not be stored more than one day.

Storage/Stability

Fluprostenol isopropyl ester is stable as supplied for at least two years if kept frozen at -20 °C. It is stable in DMSO or DMF for at least six months if kept frozen at -20 °C.

References

- 1. Abramovitz, M., et al., Biochim. Biophys. Acta, **1483**, 285-293 (2000).
- 2. Sharif, N.A., et al., .J. Pharm. Pharmacol., **51**, 685-694 (1999).
- 3. Carrasco, M.P., et al., J. Clin. Endocrinol. Metab., **81**, 2104-2110 (1996).

IRB 11/01