

PRODUCT INFORMATION

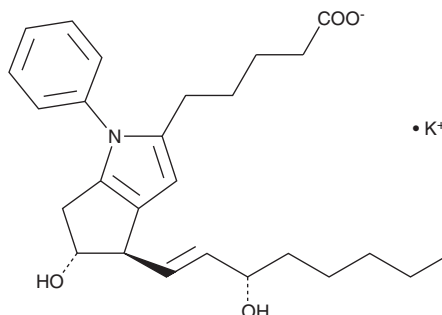


Piriprost (potassium salt)

Item No. 18228

CAS Registry No.: 88851-62-1
Formal Name: 1,4(R),5(R),6-tetrahydro-5-hydroxy-4-[(1E,3S)-3-hydroxy-1-octenyl]-1-phenyl-cyclopenta[b]pyrrole-2-pentanoic acid, monopotassium salt

Synonym: U-60257B
MF: C₂₆H₃₄NO₄ • K
FW: 463.7
Purity: ≥98%
UV/Vis.: λ_{max}: 239 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥1 year



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Piriprost (potassium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the piriprost (potassium salt) in the solvent of choice, which should be purged with an inert gas. Piriprost (potassium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of piriprost (potassium salt) in these solvents is approximately 43, 30, and 8.6 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 piriprost (potassium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of piriprost (potassium salt) in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Piriprost is a structural analog of prostaglandin I₂ (PGI₂) with low IP receptor-mediated activity. Piriprost inhibits 5-lipoxygenase with an IC₅₀ around 100 μM, as measured by the release of 5-HETE from cultured myometrial cells.¹ Piriprost inhibits the release of histamine and leukotrienes from isolated porcine lung cells with an IC₅₀ of 0.11 μM, implicating its role in inflammation and allergic responses.²

References

1. Cejic, S.S. and Kennedy, T.G. Examination of the effects of piriprost (U-60, 257B) on alkaline phosphatase activity of rat endometrial stromal cells in vitro. *Prostaglandins* **42**, 179-189 (1991).
2. McCormack, D.G. and Peterson, N.A.M. The contrasting influence of two lipoxygenase inhibitors on hypoxic pulmonary vasoconstriction in anesthetized pigs. *Am. Rev. Respir. Dis.* **139**(1), 100-105 (1989).

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.

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