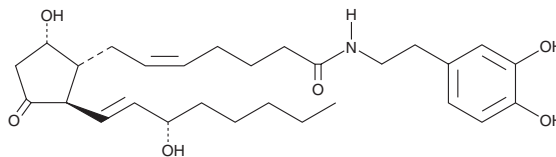


PRODUCT INFORMATION



Prostaglandin D₂ Dopamine Item No. 9002504

Formal Name: 9 α ,15S-dihydroxy-11-oxo-prosta-5Z,13E-dien-1-oic N-[2-(3,4-dihydroxyphenyl)ethyl]amide
Synonyms: PGD₂ DA, PGD₂ Dopamine
MF: C₂₈H₄₁NO₆
FW: 487.6
Purity: $\geq 95\%$
Supplied as: A 1 mg/ml solution in ethanol
Storage: -20°C
Stability: ≥ 1 year



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

Laboratory Procedures

Prostaglandin D₂ (PGD₂) dopamine is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of PGD₂ dopamine in these solvents is approximately 20 and 30 mg/ml, respectively.

PGD₂ dopamine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of PGD₂ dopamine should be diluted with the aqueous buffer of choice. PGD₂ dopamine has a solubility of 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PGD₂ (Item No. 12010), the major eicosanoid product of mast cells in the immune system, is also produced in the brain where it is involved in sleep regulatory mechanisms.^{1,2} Further pharmacological actions include inhibition of platelet aggregation, relaxation of vascular smooth muscle, and regulation of reproductive development.³ Dopamine-containing neurons in the brain are involved in reward-motivated behavior, motor control, and hormone release.⁴ Peripheral, paracrine actions of dopamine include the control of vasodilation, sodium excretion, insulin production, gastrointestinal motility, and the activity of lymphocytes.^{2,5} Catecholamines are known to stimulate prostanoid synthesis by acting as co-substrates.⁶ PGD₂ dopamine is a conjugate of the neurotransmitter dopamine and PGD₂. It can be used to study the biological function of PGD₂ in the brain and periphery.

References

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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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