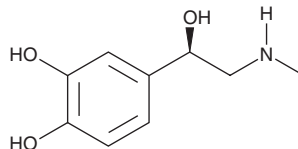


PRODUCT INFORMATION



(-)-Epinephrine Item No. 18626

CAS Registry No.: 51-43-4
Formal Name: 4-[(1R)-1-hydroxy-2-(methylamino)ethyl]-1,2-benzenediol
Synonyms: Adrenaline, NSC 62786
MF: C₉H₁₃NO₃
FW: 183.2
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 281 nm



Laboratory Procedures

For long term storage, we suggest that (-)-epinephrine be stored as supplied at -20°C. It should be stable for at least two years.

(-)-Epinephrine is supplied as a crystalline solid. (-)-Epinephrine is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. For biological experiments, we suggest that organic solvent-free aqueous solutions of (-)-epinephrine be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of berberine in water, is <0.1mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

(-)-Epinephrine is a natural neurotransmitter that is released from the adrenal medulla and activates adrenoceptors (K_is = are 15, 735, and 3,970 nM for α_{1A}-, β₂-, and β₁-adrenergic receptors, respectively).¹⁻³ Through these receptors, (-)-epinephrine may induce either contraction or relaxation of vascular smooth muscle, depending on adrenoceptor subtype expression.³ Receptor-mediated actions of (-)-epinephrine are also relevant to blocking anaphylaxis, reversing cardiac arrest, and reducing bleeding in clinical trials.⁴⁻⁶

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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