

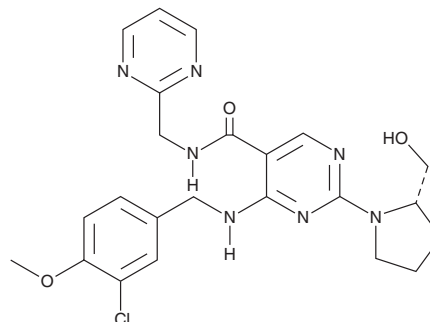
PRODUCT INFORMATION



Avanafil

Item No. 23024

CAS Registry No.: 330784-47-9
Formal Name: 4-[[[(3-chloro-4-methoxyphenyl)methyl]amino]-2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-N-(2-pyrimidinylmethyl)-5-pyrimidinecarboxamide
Synonym: TA-1790
MF: C₂₃H₂₆ClN₇O₃
FW: 484.0
Purity: ≥98%
UV/Vis.: λ_{max}: 237, 266, 310 nm
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

Avanafil is supplied as a crystalline solid. A stock solution may be made by dissolving the avanafil in the solvent of choice, which should be purged with an inert gas. Avanafil is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of avanafil in these solvents is approximately 20 mg/ml.

Avanafil is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, avanafil should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Avanafil has a solubility of approximately 0.05 mg/ml in a 1:20 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Avanafil is an orally bioavailable, potent, and competitive inhibitor of phosphodiesterase (PDE) 5 (IC₅₀ = 2.2 nM).¹ It is selective, with IC₅₀ values of 630, >5,000, and >5,000 nM for PDE6, PDE1-4, and PDE7-11, respectively, in an enzyme assay. Avanafil potentiates penile tumescence in dogs in a dose-dependent manner. Formulations containing avanafil have been used to treat erectile dysfunction.²

References

1. Kotera, J., Mochida, H., Inoue, H., *et al.* Avanafil, a potent and highly selective phosphodiesterase-5 inhibitor for erectile dysfunction. *J. Urol.* **188**(2), 668-674 (2012).
2. Kedia, G.T., Ückert, S., Assadi-Pour, F., *et al.* Avanafil for the treatment of erectile dysfunction: Initial data and clinical key properties. *Ther. Adv. Urol.* **5**(1), 35-41 (2013).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM