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ProductInformation

A-350619 hydrochloride

Product Number A 6604 Storage Temperature 2-8 °C

CAS RN: 538368-27-3 (Free base)

Synonyms: 3-[2-(4-Chlorophenylthio)phenyl]-N-(4-dimethylaminobutyl)acrylamide hydrochloride

Product Description

Molecular Formula: C₂₁H₂₅CIN₂OS ⁺ HCl

Molecular Weight: 425.41

Soluble guanylyl cyclase receptor is a major receptor for nitric oxide (NO). Guanylyl cyclase converts GTP to cyclic GMP affecting such physiological processes as smooth muscle relaxation, neurotransmission, inhibition of platelet aggregation and immune response.

A-350619, an activator of soluble guanylyl cyclase, modulates the catalytic properties of guanylyl cyclase. It increases V_{max} from 0.1 to 14.5 $\mu\text{mol/min/mg}$ (145 fold increase), and lowers K_m from 300 to 50 μM (6 fold decrease).

A-350619 relaxes cavernosum tissue strips in a dose-dependent manner with EC $_{50}$ of 80 μ M. Because A-350619 at 1 μ mol/kg induces penile erection in a conscious rat model, it may be useful as an alternate method of enhancing the effect of NO for the treatment of sexual dysfunction.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Soluble in water at 23 mg/mL

Storage/Stability

Store at 2-8 °C

Sold under license from Abbott Laboratories

Reference

Miller, L.N., et al., A-350619: a novel activator of soluble guanylyl cyclase., Life Sci., **72**, 1015-1025 (2003).

AH,PHC 02/05-1