

PRODUCT INFORMATION



ICI 89406

Item No. 42370

CAS Registry No.: 53671-71-9

Formal Name: N-[2-[[3-(2-cyanophenoxy)-2-hydroxypropyl]amino]ethyl]-N'-phenyl-urea

MF: C₁₉H₂₂N₄O₃

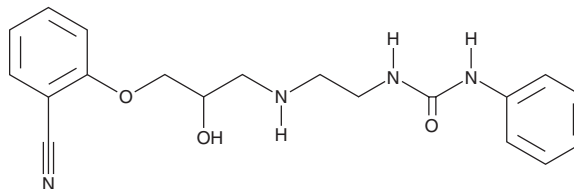
FW: 354.4

Purity: ≥98%

Supplied as: A 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

ICI 89406 is supplied as a solid. A stock solution may be made by dissolving the ICI 89406 in the solvent of choice, which should be purged with an inert gas. ICI 89406 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

ICI 89406 is an antagonist of β_1 -adrenergic receptors (IC_{50} = 4.2 nM).¹ It is selective for β_1 -adrenergic receptors over β_2 -adrenergic receptors (IC_{50} = 678 nM). ICI 89406 also acts as a partial agonist at β_1 - and β_2 -adrenergic receptors, inducing cAMP accumulation in CHO-K1 cells expressing the human receptors (EC_{50} s = 0.81 and 60.26 nM, respectively).²

References

1. Nanoff, C., Freissmuth, M., and Schütz, W. The role of a low β_1 -adrenoceptor selectivity of [³H]CGP-12177 for resolving subtype-selectivity of competitive ligands. *Naunyn Schmiedeberg's Arch. Pharmacol.* **336**(5), 519-525 (1987).
2. Mistry, S.N., Baker, J.G., Fischer, P.M., *et al.* Synthesis and in vitro and in vivo characterization of highly β_1 -selective β -adrenoceptor partial agonists. *J. Med. Chem.* **56**(10), 3852-3865 (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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