

Propranolol (hydrochloride)

Catalog No: tcsc2680



Available Sizes

Size: 100mg

Size: 500mg

Size: 1g



Specifications

CAS No:

318-98-9

Formula:

$C_{16}H_{22}ClNO_2$

Pathway:

GPCR/G Protein;Autophagy

Target:

Adrenergic Receptor;Autophagy

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 150 mg/mL (507.10 mM)

Observed Molecular Weight:

295.8

Product Description

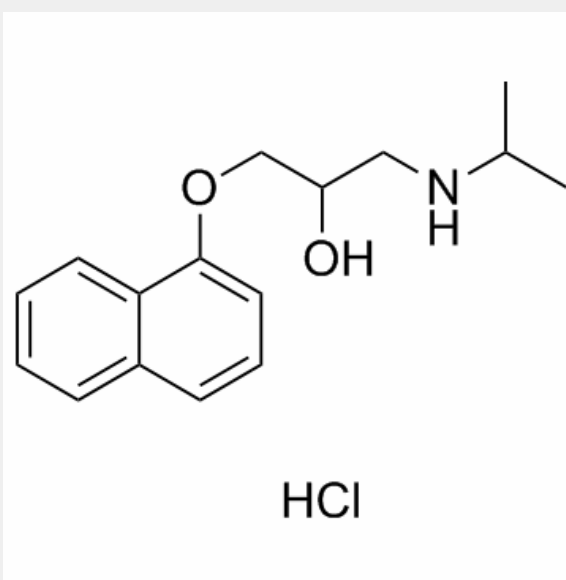
Propranolol hydrochloride is a nonselective β -adrenergic receptor (**β AR**) antagonist with an **IC₅₀** of 12 nM.

IC50 & Target: IC50: 12 nM (β AR)^[1]

In Vitro:

In cultured endothelial or tumor cells, propranolol has been shown to both reduce cAMP levels and simultaneously activate the mitogen-activated protein kinase (MAPK) pathway downstream of β AR inhibition^[2]. It displays high affinity for 5-HT_{1B} receptors (K_i = 17 nM), and milder affinity for 5HT_{1D} receptors (K_i = 10.2 μ M)^[3].

In Vivo: Chronic administration of propranolol increased the beta(1)-adrenoceptors but decreased the beta(2)-adrenoceptors without changing total amount of plasma membrane beta-adrenoceptors^[4].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!