

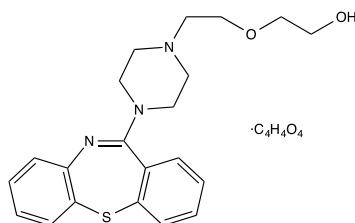
Catalog # 10-2587

Quetiapine hemifumarate

CAS# 111974-72-2

2-[2-(4-Dibenzo[b,f][1,4]thiazepin-11-yl-1-piperazinyl)ethoxy]ethanol hemifumarate; ICI-204636

Lot # X106357



Atypical antipsychotic agent. Antagonist at serotonin (5-HT₂) and dopamine (D₂) receptors, IC₅₀s=148 and 329 nM respectively.² Reverses depressive-like behavior and reduces DNA methyltransferase activity induced by maternal deprivation in a rat model.³ Efficacious as a monotherapy in the treatment of posttraumatic stress disorder.⁴ Quetiapine promotes oligodendroglial differentiation and remyelination via upregulation of oligodendrocyte transcription factor 1 (Olig1).⁵ Promotes myelin repair by inhibiting microglial activation.⁶

- 1) Ellenbroek *et al.* (1996); Activity of "seroquel" (ICI 204,636) in animal models for atypical properties of antipsychotics: a comparison with clozapine; *Neuropsychopharmacology* **15** 406
- 2) Saller and Salama (1993), *Seroquel: biochemical profile of a potential atypical antipsychotic*; *Psychopharmacology (Berl)* **112** 285
- 3) Ignacio *et al.* (2017), *Quetiapine treatment reverses depressive-like behavior and reduces DNA methyltransferase activity induced by maternal deprivation*; *Behav. Brain Res.* **320** 225
- 4) Villarreal *et al.* (2016), *Efficacy of Quetiapine Monotherapy in Posttraumatic Stress Disorder: A Randomized, Placebo-Controlled Trial*; *Am.J. Psychiatry* **173** 1205
- 5) Wang *et al.* (2021), *Quetiapine promotes oligodendroglial process outgrowth and membrane expansion by orchestrating the effects of Olig1*; *Glia* **69** 1709
- 6) Wang *et al.* (2015), *Quetiapine Inhibits Microglial Activation by Neutralizing Abnormal STIM1-Mediated Intercellular Calcium Homeostasis and Promotes Myelin Repair in a Cuprizone-Induced Mouse Model of Demyelination*; *Front. Cell. Neurosci.* **9** 492

PHYSICAL DATA

Molecular Weight:	441.54
Molecular Formula:	C ₂₁ H ₂₅ N ₃ O ₂ S·0.5C ₄ H ₄ O ₄
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at room temperature for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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