

# PQ401

**Catalog No: tcsc1386**



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

196868-63-0

**Formula:**

$C_{18}H_{16}ClN_3O_2$

**Pathway:**

Protein Tyrosine Kinase/RTK

**Target:**

IGF-1R

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 14.29 mg/mL (41.81 mM; Need ultrasonic); H2O :

**Observed Molecular Weight:**

341.79

## Product Description

PQ401, a selective insulin-like growth factor-1 receptor blocker, is a novel diarylurea compound that inhibits IGF1R autophosphorylation with IC50

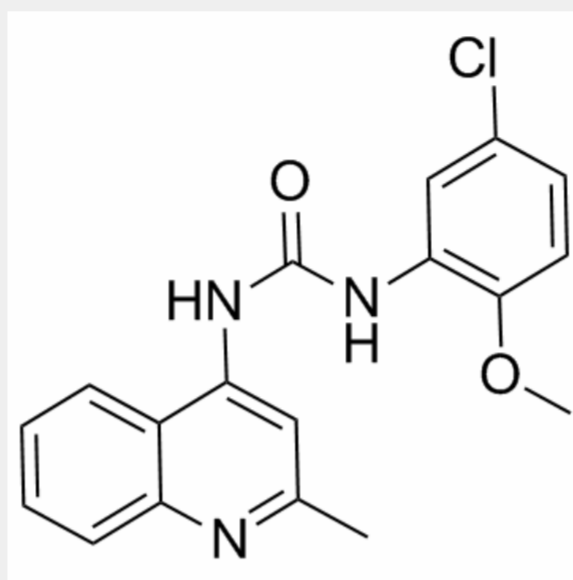
IC50 Value: 12 uM (inhibited autophosphorylation of the IGF-1R in cultured human MCF-7 cells) [1]

Target: IGF1R

in vitro: PQ401 inhibited autophosphorylation of the IGF-IR in cultured human MCF-7 cells with an IC<sub>50</sub> of 12 micromol/L and autophosphorylation of the isolated kinase domain of the IGF-IR with an IC<sub>50</sub>

in vivo: IGF1R inhibition by PQ401 exerted no significant effects on diabetic kidney disease parameters, arguing against a role for IGF-I in the pathogenesis of diabetic kidney disease. However, PQ401 affects normal kidneys, inducing renal hypertrophy as well as collagen and fat accumulation, with increased renal IGF-I mRNA, suggestive of a damage-regeneration process [2].

Clinical trial: No Development Reported



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