

## Product Specification Sheet

**Product Name:** PQ401

**Catalog Number:** C7740

**Technical information:**

Chemical Formula:  $C_{18}H_{16}ClN_3O_2$

CAS #: 196868-63-0

Molecular Weight: 341.79

Purity: > 98%

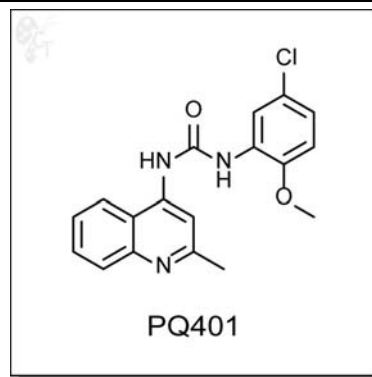
Appearance: white solid

Solubility: Soluble in DMSO up to 50 mM

Chemical Name: N-(5-Chloro-2-methoxyphenyl)-N'-(2-methylquinolin-4-yl)urea

Storage: Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.293mL of DMSO for each mg of PQ401.
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** PQ401 is a diarylurea-based antagonist of IGF-1R, inhibiting autophosphorylation in MCF-7 cells and the IGF-1R isolated kinase domain at IC50s of 12 uM and <1 uM, respectively. In IGF-1R stimulated MCF-7 cells, PQ401 was more effective at an IC50 of 6 uM. In MCF-7 cells IGF-1-mediated signaling is decreased by way of the Akt antiapoptotic pathway. Prolonged incubation with PQ401 induces a dose-dependent increase in caspase activation. (1)

**Reference:** 1. Gable et al., Diarylureas are small-molecule inhibitors of insulin-like growth factor I receptor signaling and breast cancer cell growth. *Mol. Cancer Ther.* 2006, 5, 1079-1086. Pubmed ID: 16648580

To reorder: <http://www.cellagentech.com/PQ401/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*