1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{19}\text{H}_{17}\text{NO}_3\cdot\text{HCl}\cdot\frac{1}{2}\text{H}_2\text{O} \)
Batch Molecular Weight: 352.82
Physical Appearance: Off-white solid
Solubility:
- DMSO to 25 mM
- Ethanol to 5 mM
Storage: Store at RT

Batch Molecular Structure:

![Molecular Structure Image]

2. ANALYTICAL DATA

- **HPLC:** Shows 100% purity
- \(^1\text{H NMR:}\) Consistent with structure
- **Mass Spectrum:** Consistent with structure
- **Microanalysis:**
  - Carbon Hydrogen Nitrogen
  - Theoretical: 64.68 5.43 3.97
  - Found: 64.83 5.31 4.15
Product Information

**Product Name:** LY 294002 hydrochloride

**Catalog No.:** 1130  
**Batch No.:** 4

**CAS Number:** 934389-88-5  
**IUPAC Name:** 2-(4-Morpholinyl)-8-phenyl-4H-1-benzopyran-4-one hydrochloride

**Description:**
Prototypical PI 3-kinase inhibitor (IC50 values are 0.31, 0.73, 1.06 and 6.60 μM for PI 3-Kβ, PI 3-Kα, PI 3-Kδ and PI 3-Kγ respectively). Also inhibits other kinases including, CK2, mTOR, PLK1, PIM1 and PIM3. Inhibits proliferation and induces apoptosis in human colon cancer cells in vitro and in vivo. Suppresses proliferation of mESCs. Inhibits autophagic sequestration in rat hepatocytes. Negative Control also available. View R&D Systems’ research poster featuring LY 294002 hydrochloride. Please product datasheet on www.tocris.com for full description.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C19H17NO3.HCl.½H2O
- **Batch Molecular Weight:** 352.82
- **Physical Appearance:** Off-white solid
- **Minimum Purity:** >99%

**Storage:** Store at RT

**Solubility & Usage Info:**
- DMSO to 25 mM
- Ethanol to 5 mM

**Stability and Solubility Advice:**
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**