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## DATASHEET

LY 294002 hydrochloride

### Product overview

|                          |   |
|--------------------------|---|
| <b>Name</b>              | LY 294002 hydrochloride                         |
| <b>Cat No</b>            | HB2266  |
| <b>Alternative names</b> | TGX-115, PIK-108                                |
| <b>Biological action</b> | Inhibitor                                       |
| <b>Purity</b>            | >99%  |
| <b>Description</b>       | PI3-K inhibitor. Suppresses mESC proliferation. |

### Biological Data

**Biological description** LY 294002 hydrochloride is a competitive and reversible PI3-Kinase inhibitor ( $IC_{50}$  values are 0.5, 0.6, 0.3 and 3.8  $\mu$ M at p110 $\alpha$  (PI3-K $\alpha$ ), p110 $\beta$  (PI3-K $\beta$ ), p110 $\delta$  (PI3-K $\delta$ ) and p110 $\gamma$  (PI3-K $\gamma$ ) respectively). It also shows activity at a range of other PI3-K related kinases and other targets.

LY 294002 additionally inhibits growth of many tumor types and induces apoptosis. It also suppresses proliferation of mESCs (mouse embryonic stem cells).

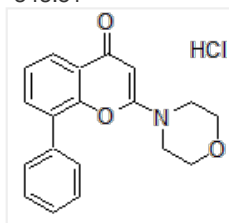
### Solubility & Handling

**Storage instructions** Room temperature  
**Important** This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### Chemical Data

**Chemical name** 2-(4-Morpholinyl)-8-phenyl-4H-1-benzopyran-4-one hydrochloride  
**Molecular Weight** 343.81

**Chemical structure**



**Molecular Formula**  $C_{19}H_{17}NO_3 \cdot HCl$   
**CAS Number** 934389-88-5  
**PubChem identifier** 11957589  
**SMILES** Cl.O=C1C=C(OC2=C1C=CC=C2C1=CC=CC=C1)N1CCOCC1  
**InChIKey** OQZQSRICUOWBLW-UHFFFAOYSA-N

### References

**A specific inhibitor of phosphatidylinositol 3-kinase, 2-(4-morpholinyl)-8-phenyl-4H-1-benzopyran-4-one (LY294002).**

Vlahos et al (1994) J Biol Chem 269(7)

PubMedID

8106507

**Phosphoinositide 3-kinase inhibitor LY294002 but not serum withdrawal suppresses proliferation of murine embryonic stem cells.**

Lianguzova et al (2007) Cell Biol Int 31(4)

PubMedID

17321171

**The phosphatidylinositol 3-kinase inhibitors wortmannin and LY294002 inhibit autophagy in isolated rat hepatocytes.**

Biommaart et al (1997) Eur J Biochem 243(1-2)

PubMedID

9030745

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