

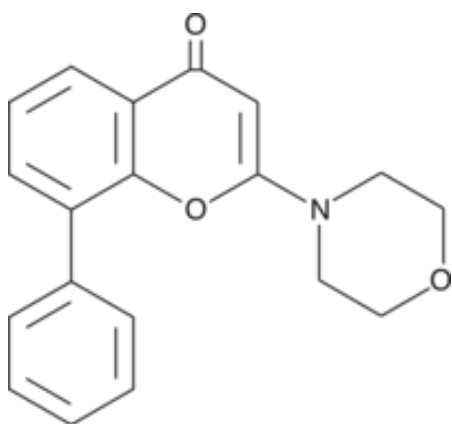
Cat No. 89-Y31

LY294002

5mg

LY294002 is a cell permeable, selective phosphatidylinositol 3-kinase (P13K) inhibitor that acts as a competitor inhibitor of the ATP binding site of the enzyme. LY294002 inhibits cell proliferation of choroidal melanoma OCM-1 cells. In mES-C's LY294002 prevents self-renewal by inhibiting LIF2. LY294002 does not affect the activities of EGF receptor kinase, MAP kinase, PKC, PI 4-kinase, S6 kinase and c-Src even at 50 $\mu$ l. LY294002 has also been shown to be an inhibitor of casein kinase II.

## TECHNICAL INFORMATION



**Other Names:** 2-(4-morpholinyl)-8-phenyl-4H-1-benzopyran-4-one

**Chemical Formula:** C<sub>19</sub>H<sub>17</sub>NO<sub>3</sub>

**CAS Number:** 154447-36-6

**Molecular Weight:** 307.3

**Purity:** >98%

**Appearance:** Off White Crystalline solid

**Solubility:** DMSO



**For research purposes only**

## STORAGE AND HANDLING

**Storage:** Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

**Stability:** Stock solutions stable at -20°C for up to 2 years.

**Shipping Conditions:** Shipped at room temperature.

## PRODUCT USE

Soluble in DMSO. For a 10mM concentrated stock solution, reconstitute the compound by adding 1627 $\mu$ l to the entire contents of the vial. If precipitate is observed, vortex for 5 minutes. For most cells the maximum tolerance to DMSO is <0.5%.

## REFERENCES

1. Vlahos CJ et al. (1994) A specific inhibitor of phosphatidylinositol 3-kinase, 2-(4-morpholinyl)-4H-1-benzopyran-4-one (LY294002). *J Biol Chem.* 269 (7):5241-8.
2. Paline NR et al. (2004) Regulation of embryonic stem cell self-renewal by phosphoinositide 3-kinase-dependent signaling. *J Biol Chem.* 279(46):48063-70.
3. Chen T et al. (2011) Rapamycin and other longevity-promoting compounds enhance the generation of mouse induced pluripotent stem cells. *Aging Cell.*