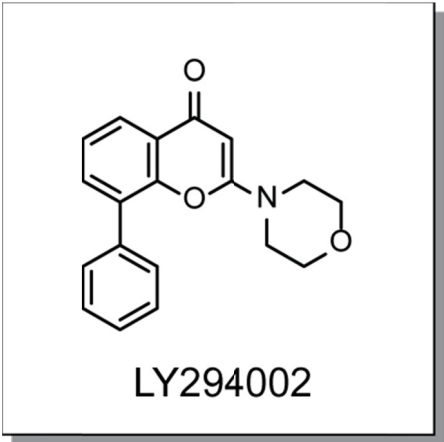




Product Specification Sheet

Product Name:	LY294002	
Catalog Number:	C5929-5 (powder) C5929-5s (10mM in DMSO)	
Package Size:	5 mg	
Technical information:		
Chemical Formula:	C ₁₉ H ₁₇ NO ₃	
CAS #:	154447-36-6	
Molecular Weight:	307.34	
Purity:	>98%	
Formulation:	White solid	
Solubility:	Soluble in DMSO up to 100 mM	
Chemical Name:	2-morpholin-4-yl-8-phenylchromen-4-one	
Storage:	Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.	
Handling:	<ul style="list-style-type: none">For C5929-5 (powder), add 1.63 mL of DMSO to make 10 mM solution.For C5929-5s, before open the vial, centrifuge the vial at 500rpm x 1 min in a 50 mL conical tube to ensure full sample recovery.	
Biological Activity:	<p>LY294002 is a highly selective phosphatidylinositol 3-kinase (PI3K) inhibitor, with no inhibitory activities against EGF receptor kinase, MAP kinases, PKC, PI 4-kinase, S6 kinase and c-Src. Recent study also showed it inhibits of casein kinase II.</p> <p>LY294002 inhibits cell proliferation of choroidal melanoma OCM-1 cells. In regulation of murine ES cell self-renewal, LY294002 led to a reduction in the ability of LIF to maintain self-renewal via regulated expression of dominant negative delta-p85. It can also enhance the generation of mouse induced pluripotent stem cells.</p>	
Reference:	<ol style="list-style-type: none">Vlahos CJ et al. A specific inhibitor of phosphatidylinositol 3-kinase, 2-(4-morpholinyl)-4H-1-benzopyran-4-one (LY294002). J Biol Chem. 1994; 269(7):5241-8.Paline NR et al. Regulation of embryonic stem cell self-renewal by phosphoinositide 3-kinase-dependent signaling. J Biol Chem. 2004; 279(46):48063-70.Chen T et al. Rapamycin and other longevity-promoting compounds enhance the generation of mouse induced pluripotent stem cells. Aging Cell. 2011; 10(5):908-911	

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