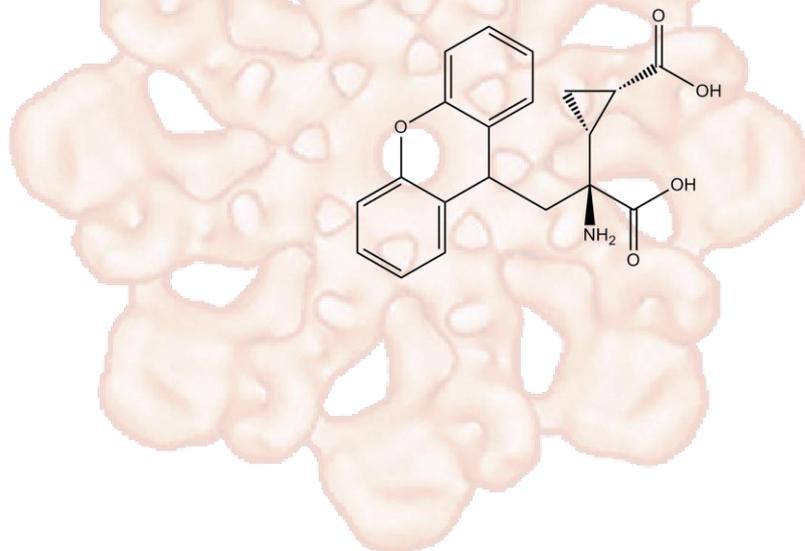


# Product Data Sheet

## LY341495

<b>Cat. No.:</b>	A3577
<b>CAS No.:</b>	201943-63-7
<b>Formula:</b>	C <sub>20</sub> H <sub>19</sub> NO <sub>5</sub>
<b>M.Wt:</b>	353.38
<b>Synonyms:</b>	LY 341495; LY-341495
<b>Target:</b>	GPCR/G protein
<b>Pathway:</b>	mGluR
<b>Storage:</b>	Store at -20°C



## Solvent & Solubility

Limited solubility, soluble in DMSO

In Vitro

Preparing Stock Solutions	Solvent Concentration	Mass	1mg	5mg	10mg
	1 mM		2.8298 mL	14.1491 mL	28.2981 mL
	5 mM		0.5660 mL	2.8298 mL	5.6596 mL
	10 mM		0.2830 mL	1.4149 mL	2.8298 mL

Please refer to the solubility information to select the appropriate solvent.

## Biological Activity

Shortsummary

Metabotropic glutamate receptor antagonist

IC<sub>50</sub> & Target

In Vitro

### Cell Viability Assay

Cell Line:	U87 cell lines
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	72h; 1 μM
Applications:	It is well established that U87 cells proliferate in a glutamate-dependent

manner and drugs LY341495, an inhibitor of metabotropic glutamate receptor have been shown to inhibit proliferation of glioma cells. The result shown that Iressa in combination with LY341495 is effective in inhibiting proliferation.

#### Animal experiment

Animal models: Male 6-week-old Sprague-Dawley rats

Dosage form: 3 mg/kg; intraperitoneal injection

Applications: We tested the anti-immobility effect of LY341495 in the forced swim test (FST). LY341495 significantly decreased the immobility behavior ( $F(3,36)=3.05$ ;  $P<0.05$ ,  $n=10$  each). A post hoc analysis showed that rats exposed to 3 mg/kg of LY341495 had a significantly shorter immobility time ( $P<0.05$ ). To investigate the behavioral relevance of AMPA receptor transmission during the test, NBQX was injected 30 min before the test. NBQX had a significant effect on the LY341495-induced reduction in the immobility time ( $F(3,36)=3.60$ ;  $P<0.05$ ,  $n=10$  each). A post hoc analysis showed that NBQX at doses of 3 and 10 mg/kg significantly prevented the anti-immobility effect of LY341495 ( $P<0.05$ ).

Other notes: Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

In Vivo

## Product Citations

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

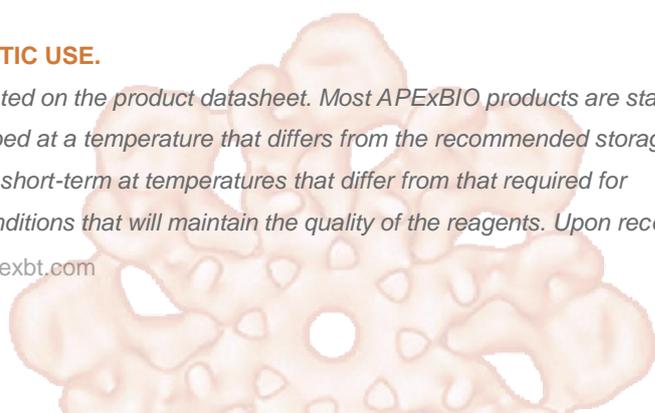
- [1] Yelskaya Z, Carrillo V, Dubisz E, et al. Synergistic Inhibition of Survival, Proliferation, and Migration of U87 Cells with a Combination of LY341495 and Iressa[J]. PloS one, 2013, 8(5): e64588.
- [2] Koike H1, Chaki S2. Requirement of AMPA receptor stimulation for the sustained antidepressant activity of ketamine and LY341495 during the forced swim test in rats. Behav Brain Res. 2014 Sep 1;271:111-5. doi: 10.1016/j.bbr.2014.05.065. Epub 2014 Jun 5.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt



*of the product, follow the storage recommendations on the product data sheet.*

**APEX BIO Technology**

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