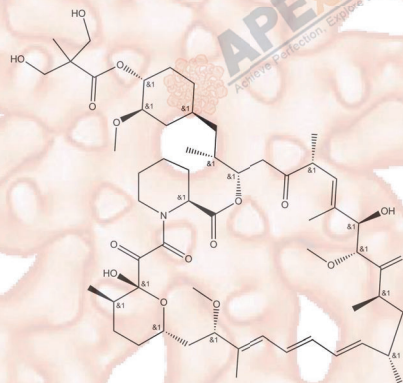


# Product Data Sheet

## Temsirolimus

Cat. No.:	A8314
CAS No.:	162635-04-3
Formula:	C <sub>56</sub> H <sub>87</sub> NO <sub>16</sub>
M.Wt:	1030.29
Synonyms:	Torisel; CCI-779; CCI 779; CCI779
Target:	PI3K/Akt/mTOR Signaling
Pathway:	mTOR
Storage:	Store at -20°C



## Solvent & Solubility

≥51.5mg/mL in DMSO, ≥11.2 mg/mL in EtOH, insoluble in H<sub>2</sub>O

In Vitro

	Solvent Concentration	Mass	1mg	5mg	10mg
Preparing					
Stock Solutions					
	1 mM		0.9706 mL	4.8530 mL	9.7060 mL
	5 mM		0.1941 mL	0.9706 mL	1.9412 mL
	10 mM		0.0971 mL	0.4853 mL	0.9706 mL

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

## Biological Activity

Shortsummary

MTOR inhibitor

IC<sub>50</sub> & Target

1.76 μM (mTOR)

In Vitro

### Cell Viability Assay

Cell Line:	PC-3 and DU145 cells
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:	100 nM, 3 days
Applications:	The growth and colony-formation of both cell lines were inhibited in a

concentration-dependent manner by CCI-779. Following a 3-day exposure to 100 nmol/L CCI-779, the numbers of colony-forming PC-3 and DU145 cells were  $0.18 \pm 0.09$  and  $0.37 \pm 0.03$ , respectively, compared with controls.

#### Animal experiment

Animal models:	Nude mice bearing DAOY xenografts
Dosage form:	Intraperitoneal injection, 20 mg/kg, daily 3 5 for 1, 2 or 4 weeks or 100 mg/kg on days 1 and 12
Applications:	CCI-779 administered at 20 mg/kg 5 days/week for 1 and 2 weeks yielded 1.6- and 2.4-fold delayed tumor growth. Time to reach 5-fold tumor volume was significantly greater in animals treated for 1 week or 2 weeks compared with control animals. Retreatment of large tumors with CCI-779 for 2 weeks (20 mg/kg i.p. 5 days/week on days 29 to 42) restored growth inhibition but did not yield tumor regression. Treatment with CCI-779 (20 mg/kg i.p.) 5 days/week for 4 weeks delayed time to reach 5-fold pretreatment volume by 174% compared with controls.
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] Wu L, Birle D C, Tannock I F. Effects of the mammalian target of rapamycin inhibitor CCI-779 used alone or with chemotherapy on human prostate cancer cells and xenografts. Cancer research, 2005, 65(7): 2825-2831.
- [2] Geoerger B, Kerr K, Tang C B, et al. Antitumor activity of the rapamycin analog CCI-779 in human primitive neuroectodermal tumor/medulloblastoma models as single agent and in combination chemotherapy[J]. Cancer research, 2001, 61(4): 1527-1532.

## 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. Shortterm 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.



## APExBIO Technology

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