

Product Name:	Temsirolimus
Product Number:	T077
CAS Number:	162635-04-3
Molecular Formula:	$C_{56}H_{87}NO_{16}$
Molecular Weight:	1030.3
Appearance:	White solid
Storage Conditions:	-20°C
Description:	<p>Temsirolimus is a semisynthetic macrocyclic lactone prepared from rapamycin by selective acylation of the 42-hydroxy group with a protected bis(dihydromethyl)propionic acid, followed by deprotection. Temsirolimus is extensively cited in the literature with over 700 citations.</p> <p>Temsirolimus is soluble in ethanol, methanol, DMF and DMSO.</p>
Mechanism of Action:	<p>Temsirolimus binds to receptor protein, FKBP12. The complex then binds to mTOR preventing it from interacting with target proteins.</p>
References:	<p>Rapamycin hydroxyesters. Skotnicki J. US Patent 5,362,718, 1994.</p> <p>CCI-779 inhibits rhabdomyosarcoma xenograft growth by an antiangiogenic mechanism linked to the targeting of mTOR/Hif-1α/VEGF signaling. Wan X. et al. Neoplasia 2006, 8, 394.</p>