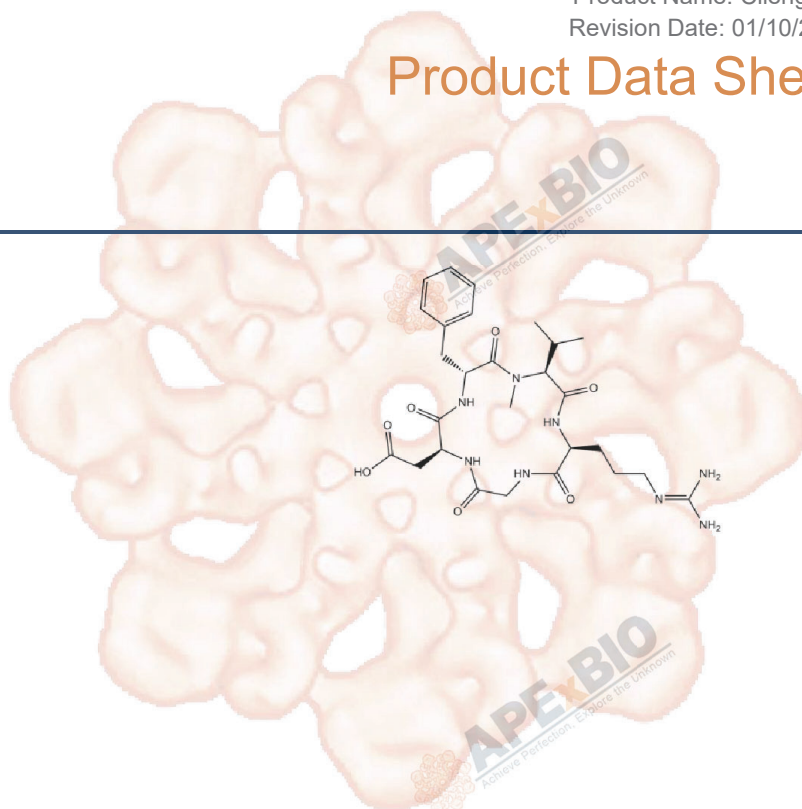


## Product Data Sheet

### Cilengitide

<b>Cat. No.:</b>	A8660
<b>CAS No.:</b>	188968-51-6
<b>Formula:</b>	C <sub>27</sub> H <sub>40</sub> N <sub>8</sub> O <sub>7</sub>
<b>M.Wt:</b>	588.66
<b>Synonyms:</b>	
<b>Target:</b>	Angiogenesis
<b>Pathway:</b>	Integrin
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

≥29.43 mg/mL in DMSO; ≥22.56 mg/mL in H<sub>2</sub>O

	Solvent	Mass			
		1mg	5mg	10mg	
In Vitro	Preparing Stock Solutions	Concentration			
		1 mM	1.6988 mL	8.4939 mL	16.9877 mL
		5 mM	0.3398 mL	1.6988 mL	3.3975 mL
		10 mM	0.1699 mL	0.8494 mL	1.6988 mL

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

### Biological Activity

Shortsummary	Integrin inhibitor for αvβ3 and αvβ5	
IC <sub>50</sub> & Target	2.3 nM (αvβ3), 37 nM (αvβ5)	
In Vitro	<b>Cell Viability Assay</b>	
	Cell Line:	meningioma lines (Ben-Men1, IOMM-Lee, HBL-52)
	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:	24 h; 100 μM/mL

	Applications:	Cilengitide(1, 10, and 100 $\mu\text{M}/\text{mL}$ ) was added to IOMM-Lee,HBL52, and Ben-Men1 cultures. Morphologic changes were monitored over 24 hours. In all three meningioma lines, cells strated to round up and detach from the flask in a concentration-dependent manner, showing that cilengitide decreases cell adhesion. Quantification of cell viability after 24 hours, cilengitide treatment showed in all three cell lines a highly significant dose-dependent but rather mild decline of viable cells.
In Vivo	<b>Animal experiment</b>	
	Animal models:	8- to 10-week-old Swiss Nude mice
	Dosage form:	75 mg/kg; intraperitoneal injection
	Applications:	We intended to test a daily dosage of cilengitide (75 mg/kg) as a monotherapy or combined with irradiation in the orthotopic mouse model. A significant reduction of tongue-like brain invasion ( $P\leq 0.01$ ) could be observed in tumors of mice treated with either cilengitide alone (35% decrease) or with cilengitide and irradiation (35.5% decrease).
	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.

## Product Citations

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

## References

[1] Wilisch-Neumann A, Kliese N, Pachow D, et al. The integrin inhibitor cilengitide affects meningioma cell motility and invasion[J]. Clinical Cancer Research, 2013, 19(19): 5402-5412.

## 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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