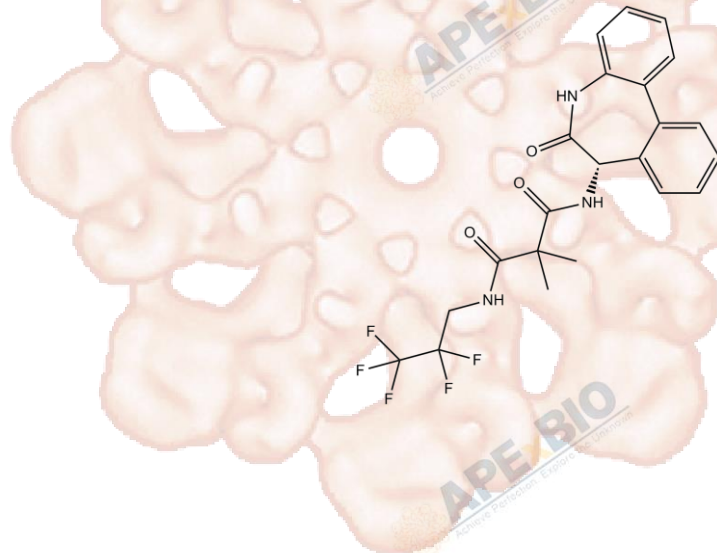


# Product Data Sheet

## RO4929097

<b>Cat. No.:</b>	A4005
<b>CAS No.:</b>	847925-91-1
<b>Formula:</b>	C <sub>22</sub> H <sub>20</sub> F <sub>5</sub> N <sub>3</sub> O <sub>3</sub>
<b>M.Wt:</b>	469.4
<b>Synonyms:</b>	
<b>Target:</b>	Proteases
<b>Pathway:</b>	Gamma Secretase
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

≥23.47 mg/mL in DMSO; insoluble in H<sub>2</sub>O; ≥45.2 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Mass			
	Solvent Concentration	1mg	5mg	10mg
	1 mM	2.1304 mL	10.6519 mL	21.3038 mL
	5 mM	0.4261 mL	2.1304 mL	4.2608 mL
	10 mM	0.2130 mL	1.0652 mL	2.1304 mL

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

### Biological Activity

Shortsummary

γ secretase inhibitor

IC<sub>50</sub> & Target

4 nM (γ secretase), 14 nM (Aβ<sub>40</sub>), 5 nM (ICN)

In Vitro

#### Cell Viability Assay

Cell Line:	SUM190 and SUM149 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:	1 μM, 14 days for 2D cultures 7 days for 3D cultures

	Applications:	After treating with increasing doses of ionizing radiation in the presence or absence of the drug, 2D colonies were allowed to grow for 10–14 days, while the mammospheres were permitted to grow for 1 week. At 1 $\mu$ M, RO4929097 was able to sensitize adherent cells to radiation with a more significant effect seen in SUM190 than in SUM149 cells. However, the same dose of inhibitor radioprotected cells grown under conditions that favor the enrichment of the cancer stem cells at higher doses of ionizing radiation. This discrepancy between 2D and 3D cultures suggested that cell contact may be needed for a Notch inhibitor to have a significant effect.
In Vivo	<b>Animal experiment</b>	
	Animal models:	NOD/SCID/IL2gammaR-/- (NOG) mice injected with WM3248 cells
	Dosage form:	Oral administration, 10 mg/Kg/day for 30 days
	Applications:	There was a decrease in tumor growth with RO4929097 treatment, which was more appreciable after tumors were extracted for weight assessment. RO4929097-treated tumors also displayed lower expression of putative melanoma stem cell markers CD166, CD271 and JARID1B compared to vehicle-treated ones.
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

1. Frank SB, Berger PL, et al. "Human prostate luminal cell differentiation requires NOTCH3 induction by p38-MAPK and MYC." J Cell Sci. 2017 Jun 1;130(11):1952-1964.PMID:28446540

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

## References

[1] Debeb B G, Cohen E N, Boley K, et al. Pre-clinical studies of Notch signaling inhibitor RO4929097 in inflammatory breast cancer cells. Breast cancer research and treatment, 2012, 134(2): 495-510.

[2] Huynh C, Poliseno L, Segura M F, et al. The novel gamma secretase inhibitor RO4929097 reduces the tumor initiating potential of melanoma. PloS one, 2011, 6(9): e25264.

## 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

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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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