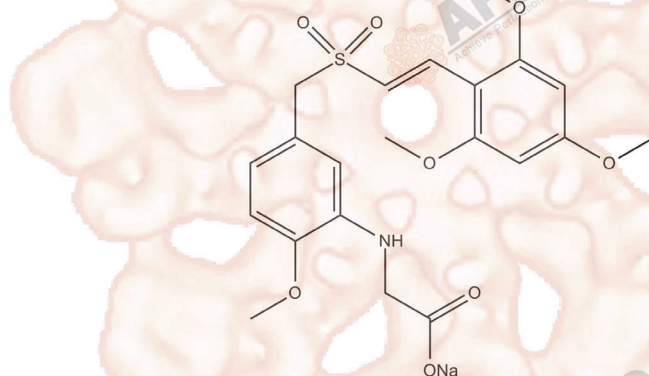


Rigosertib sodium salt

Cat. No.:	A1404
CAS No.:	1225497-78-8
Formula:	C ₂₁ H ₂₄ NNaO ₈ S
M.Wt:	473.47
Synonyms:	ON-01910, Estybon
Target:	Cell Cycle/Checkpoint
Pathway:	PLK
Storage:	Store at -20°C



Solvent & Solubility

≥ 23.65mg/mL in DMSO

In Vitro

Preparing	Solvent	Mass	1mg	5mg	10mg
		Concentration			
Stock Solutions	1 mM		2.1121 mL	10.5603 mL	21.1207 mL
	5 mM		0.4224 mL	2.1121 mL	4.2241 mL
	10 mM		0.2112 mL	1.0560 mL	2.1121 mL

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

Biological Activity

Shortsummary

Plk1 inhibitor

IC₅₀ & Target

9 nM (Plk1)

In Vitro

Cell Viability Assay

Cell Line: HeLa 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: 250 nM; 8, 12, 16, 20 or 28 hrs

Applications: In HeLa cells, Rigosertib significantly inhibited PLK1 activity at all stages of the

cell cycle. Moreover, the loss of PLK1 activity was not due to degradation of PLK1 or inhibition of PLK1 synthesis.

Animal experiment

Animal models: Nude mice bearing Bel-7402, MCF-7 or MIA-PaCa cell xenografts

Dosage form: 250 mg/kg; i.p.

Applications: In nude mice bearing Bel-7402, MCF-7 or MIA-PaCa cell xenografts, Rigosertib (250 mg/kg) significantly inhibited tumor growth without obvious toxicity. In addition, Rigosertib completely inhibited PLK1 activity but partially reduced CDK1 activity.

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

1. Costa, D. C. S.; Forezi, L. S. M.; et al. "A Compendium of Tyrosine-kinase Inhibitors: Powerful and Efficient Drugs against Cancer." Rev. Virtual Quim., 2017, 9 (3), 974-1064.

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References

[1]. Gumireddy K, Reddy MV, Cosenza SC, Boominathan R, Baker SJ, Papathi N, Jiang J, Holland J, Reddy EP. ON01910, a non-ATP-competitive small molecule inhibitor of Plk1, is a potent anticancer agent. Cancer Cell. 2005 Mar;7(3):275-86.

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 APExBIO 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.

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