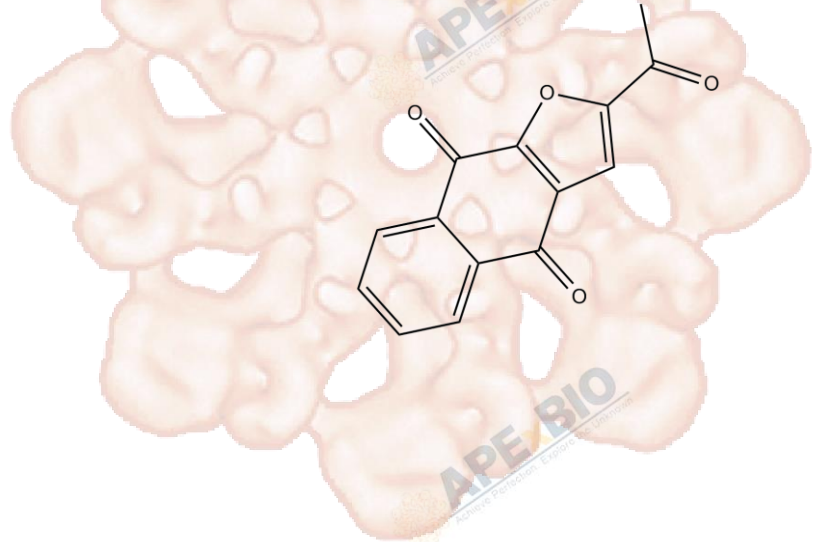


Product Data Sheet

Napabucasin

Cat. No.: B6029
CAS No.: 83280-65-3
Formula: C₁₄H₈O₄
M.Wt: 240.21
Synonyms:
Target:
Pathway:
Storage: Store at -20°C



Solvent & Solubility

insoluble in H₂O; insoluble in EtOH; ≥8.7 mg/mL in DMSO

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	4.1630 mL	20.8151 mL	41.6302 mL
	5 mM	0.8326 mL	4.1630 mL	8.3260 mL
	10 mM	0.4163 mL	2.0815 mL	4.1630 mL

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

Biological Activity

Shortsummary

STAT3 inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	PCa cell lines (22RV1 and PC-3)
Preparation method:	Soluble in DMSO. 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 μmol/L, 48, 72, 96, and 120 h

	Applications:	In PCa cell lines PC-3 and 22RV1, Napabucasin (1 μ M) inhibited cell proliferation, cell motility, cell survival, colony formation ability and induced cell apoptosis. Napabucasin increased the sensitivity of PCa cells to Docetaxel. Napabucasin treatment decreased the stemness-high cancer cells in PC-3 and 22RV1 cells. Napabucasin obviously inhibited both the SP cells from 22RV1 cells and CD133+/CD44+ cells from PC-3 cells as well as spheres from PC-3 and 22RV1 cells. In PC-3 stemness-high cancer cells, Napabucasin significantly decreased mRNA expression of Nanog, Klf4, survivin, and β -catenin.
In Vivo	Animal experiment	
	Animal models:	Immunodeficient nude mouse bearing PC-3 cells or 22RV1 cells
	Dosage form:	Intraperitoneal injection, 40 mg/kg, every 3 days
	Applications:	Napabucasin significantly suppressed the tumor growth on prostate cancer (PCa) mouse xenograft models. Treatment with napabucasin resulted in inhibition of spherogenesis with numbers of spheres significantly decreased.
	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.

References

[1]. Zhang Y, Jin Z, Zhou H, et al. Suppression of prostate cancer progression by cancer cell stemness inhibitor napabucasin[J]. Cancer medicine, 2016, 5(6): 1251-1258.

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. 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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