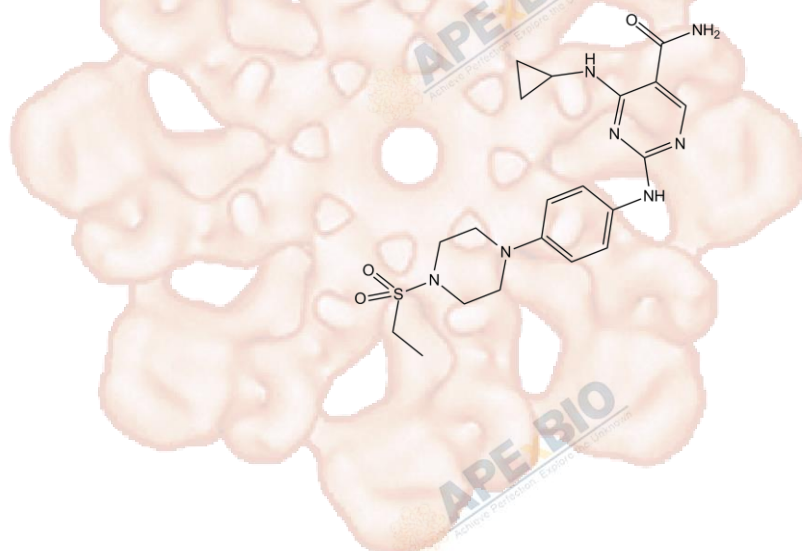


Product Data Sheet

Cerdulatinib (PRT062070)

Cat. No.:	B8023
CAS No.:	1198300-79-6
Formula:	C ₂₀ H ₂₇ N ₇ O ₃ S
M.Wt:	445.54
Synonyms:	
Target:	Chromatin/Epigenetics
Pathway:	JAK
Storage:	Desiccate at -20°C



Solvent & Solubility

≥22.3 mg/mL in DMSO; insoluble in H₂O; insoluble in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.2445 mL	11.2223 mL	22.4447 mL
	5 mM	0.4489 mL	2.2445 mL	4.4889 mL
	10 mM	0.2244 mL	1.1222 mL	2.2445 mL

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

Biological Activity

Shortsummary

Syk/JAK inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line: DLBCL (diffuse large B-cell lymphoma) cells: germinal center B-cell (GCB) subtype, activated B-cell (ABC) subtype.

Preparation method: Limited solubility. 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: 6 h

	Applications:	Cerdulatinib induces apoptosis in both GCB and ABC cell lines by caspase 3 and PARP cleavage. Cerdulatinib also triggers apoptosis and cell cycle arrest in BCR-stimulated DLBCL cells. Cerdulatinib blocks JAK/STAT and BCR signaling in both ABC and GCB cell lines as well.
In Vivo	Animal experiment	
	Animal models:	Female Lewis rats collagen-induced arthritis (CIA) model
	Dosage form:	Oral gavage twice daily.
	Applications:	3 mg/kg of Cerdulatinib suppresses the inflammation and reverses relative to pretreatment levels at 5 mg/kg. Cerdulatinib also dose-dependently leads to significant improvements in inflammatory infiltrate within the synovium and the integrity of the articular cartilage. Moreover, Cerdulatinib treatment affects anticollagen antibody formation and reduces 50% of circulating antibody titers at the 1.5, 3, and 5 mg/kg doses.
	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. Ma J, Xing W, Coffey G et al. Cerdulatinib, a novel dual SYK/JAK kinase inhibitor, has broad anti-tumor activity in both ABC and GCB types of diffuse large B cell lymphoma. *Oncotarget*. 2015 Nov 5.
2. Coffey G, Betz A, DeGuzman F et al. The novel kinase inhibitor PRT062070 (Cerdulatinib) demonstrates efficacy in models of autoimmunity and B-cell cancer. *J Pharmacol Exp Ther*. 2014 Dec;351(3):538-48.

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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