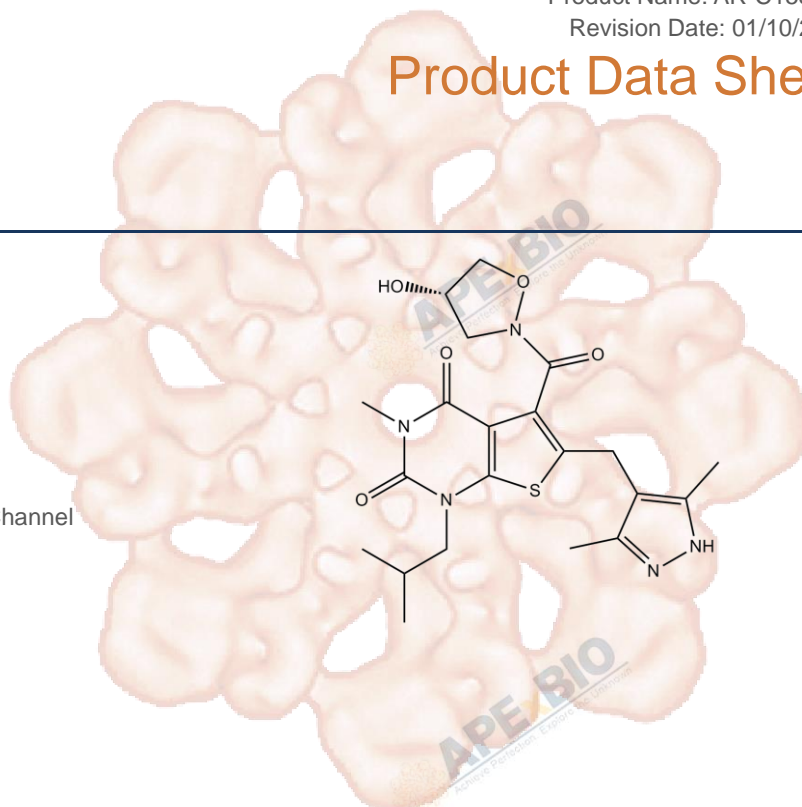


Product Data Sheet

AR-C155858

Cat. No.:	A3185
CAS No.:	496791-37-8
Formula:	C ₂₁ H ₂₇ N ₅ O ₅ S
M.Wt:	461.53
Synonyms:	AR C155858
Target:	Membrane Transporter/Ion Channel
Pathway:	MCT
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥52.5 mg/mL in DMSO; ≥57.8 mg/mL in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.1667 mL	10.8335 mL	21.6671 mL
	5 mM	0.4333 mL	2.1667 mL	4.3334 mL
	10 mM	0.2167 mL	1.0834 mL	2.1667 mL

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

Biological Activity

Shortsummary

MCT1 and MCT2 inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Ras-transformed fibroblast CCL39 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:	100 nM

	Applications:	In Ras-transformed fibroblast CCL39 cells, AR-C155858 potently suppressed the uptake of lactic acid by inhibiting MCT1 and MCT2, which significantly decreased glycolysis.
In Vivo	Animal experiment	
	Animal models:	Nude mice implanted with Ras-transformed CCL39 fibroblasts
	Dosage form:	30 mg/kg; s.c.; b.i.d., for 6 days
	Applications:	In nude mice implanted with Ras-transformed CCL39 fibroblasts that only expressed MCT1/2, AR-C155858 increased intracellular lactate pool, reduced glycolysis and growth in hypoxia, as well as inhibited tumor growth.
	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]. Le Floch R, Chiche J, Marchiq I, Naiken T, Ilc K, Murray CM, Critchlow SE, Roux D, Simon MP, Pouyssegur J. CD147 subunit of lactate/H⁺ symporters MCT1 and hypoxia-inducible MCT4 is critical for energetics and growth of glycolytic tumors. Proc Natl Acad Sci U S A. 2011 Oct 4;108(40):16663-8.

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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