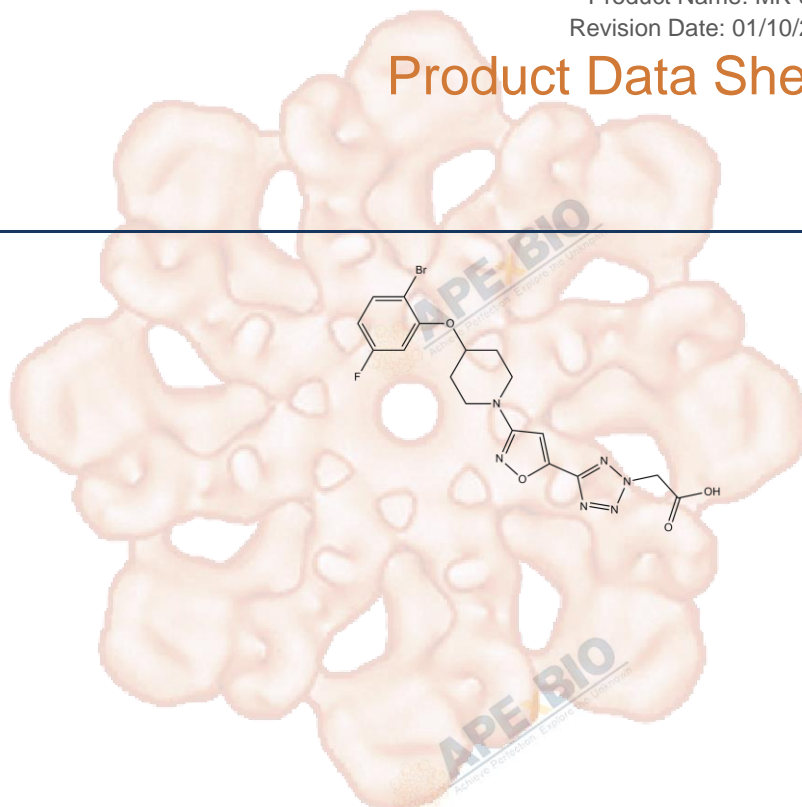


# Product Data Sheet

## MK-8245

<b>Cat. No.:</b>	A4345
<b>CAS No.:</b>	1030612-90-8
<b>Formula:</b>	C17H16BrFN6O4
<b>M.Wt:</b>	467.25
<b>Synonyms:</b>	
<b>Target:</b>	Metabolism
<b>Pathway:</b>	SCD
<b>Storage:</b>	Store at -20°C



## Solvent & Solubility

≥23.35 mg/mL in DMSO; insoluble in EtOH; insoluble in H2O

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		2.1402 mL	10.7009 mL	21.4018 mL
	5 mM		0.4280 mL	2.1402 mL	4.2804 mL
	10 mM		0.2140 mL	1.0701 mL	2.1402 mL

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

## Biological Activity

Shortsummary

SCD inhibitor, potent and liver-selective

IC<sub>50</sub> & Target

1 nM (SCD1 (human)), 3 nM (SCD1 (rat)), 3 nM (SCD1 (mouse))

In Vitro

### Cell Viability Assay

Cell Line: Rat hepatocytes

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: < 200 nM

	Applications:	In the rat hepatocyte assay which contains functional and active OATPs, MK-8245 significantly inhibited SCD with an IC50 value of 68 nM.
In Vivo	<b>Animal experiment</b>	
	Animal models:	eDIO mice
	Dosage form:	3, 10 or 30 mg/kg; p.o.
	Applications:	MK-8245, a liver-targeted small molecule SCD inhibitor, improved whole body insulin sensitivity.
	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](http://www.apexbt.com).

## References

[1]. Oballa RM, Belair L, Black WC, Bleasby K, Chan CC, Desroches C, Du X, Gordon R, Guay J, Guiral S, Hafey MJ, Hamelin E, Huang Z, Kennedy B, Lachance N, Landry F, Li CS, Mancini J, Normandin D, Poci A, Powell DA, Ramtohul YK, Skorey K, S?rensen D, Sturkenboom W, Styhler A, Waddleton DM, Wang H, Wong S, Xu L, Zhang L. Development of a liver-targeted stearyl-CoA desaturase (SCD) inhibitor (MK-8245) to establish a therapeutic window for the treatment of diabetes and dyslipidemia. J Med Chem. 2011 Jul 28;54(14):5082-96.

## 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.*

---

## APExBIO Technology

[www.apexbt.com](http://www.apexbt.com)

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: [info@apexbt.com](mailto:info@apexbt.com)

