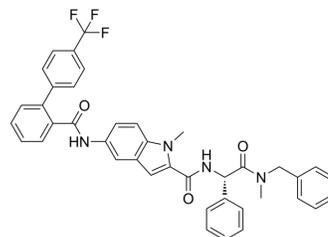


Dirlotapide

Cat. No.:	HY-U00070		
CAS No.:	481658-94-0		
Molecular Formula:	C ₄₀ H ₃₃ F ₃ N ₄ O ₃		
Molecular Weight:	674.71		
Target:	Microsomal Triglyceride Transfer Protein (MTP)		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Dirlotapide (CP742033) is a gut-selective inhibitor of microsomal triglyceride transfer protein (MTP) that reliably produces weight loss in obese dogs.
In Vivo	<p>Dogs receiving 0.3 mg dirlotapide/kg once daily have a small but significant (P=0.018) decrease (6.16 ± 2.22%, mean ± SD) in crude fat digestibility compared with the placebo-treated food-restricted dogs, but no difference in crude protein, dry matter, or energy digestibility is observed. Dirlotapide effectively reduces appetite and energy intake without affecting nutrient digestibility, except for a minimal decrease in fat digestibility^[1]. Dirlotapide (0.5 mg/kg) results in a high rate of weight loss (3.3% weekly) and anorexia, emesis, and loose stools for some dogs. Dirlotapide produces weight loss by both reducing appetite (about 90% of the weight loss activity) and by increasing fecal fat excretion (about 10% of the weight loss activity)^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

PROTOCOL

Animal Administration ^[2]	<p>Dirlotapide in the commercial formulation of a 5-mg/mL oil solution, is administered at an initial rate of 0.5 mg/kg adjusted individually based on the weight loss change in the previous 2 weeks. Dogs assigned to placebo receive the oil vehicle (identical in appearance to the dirlotapide solution) at a rate of 0.1 mL/kg and 0.075 mL/kg during the weight loss and weight management phases, respectively. The dose volume is administered directly into the dog's mouth with a dosing syringe approximately 30 min before feeding.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
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REFERENCES

- [1]. Kirk CA, et al. Influence of dirlotapide, a microsomal triglyceride transfer protein inhibitor, on the digestibility of a dry expanded diet in adult dogs. J Vet Pharmacol Ther. 2007 Aug;30 Suppl 1:66-72.
- [2]. Wren JA, et al. Biologic activity of dirlotapide, a novel microsomal triglyceride transfer protein inhibitor, for weight loss in obese dogs. J Vet Pharmacol Ther. 2007 Aug;30 Suppl 1:33-42.

Caution: Product has not been fully validated for medical applications. For research use only.

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