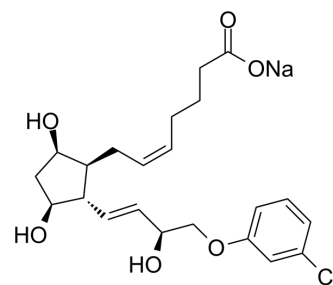


## Cloprostenol sodium salt

<b>Cat. No.:</b>	HY-108415
<b>CAS No.:</b>	55028-72-3
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>28</sub> ClNaO <sub>6</sub>
<b>Molecular Weight:</b>	446.9
<b>Target:</b>	Prostaglandin Receptor
<b>Pathway:</b>	GPCR/G Protein
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	H <sub>2</sub> O : ≥ 150 mg/mL (335.65 mM) * "≥" means soluble, but saturation unknown.					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		2.2376 mL	11.1882 mL	22.3764 mL
		<b>5 mM</b>		0.4475 mL	2.2376 mL	4.4753 mL
	<b>10 mM</b>		0.2238 mL	1.1188 mL	2.2376 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (223.76 mM); Clear solution; Need ultrasonic					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Cloprostenol sodium salt (ICI 80996 sodium salt) is a potent synthetic prostaglandin analogue, acts as a luteolytic agent <sup>[1]</sup> , and is a PGF <sub>2</sub> α receptor agonist <sup>[2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	PGF <sub>2</sub> α receptor <sup>[2]</sup>
<b>In Vitro</b>	Cloprostenol is a PGF <sub>2</sub> α receptor agonist <sup>[2]</sup> . Cloprostenol (0.1 μM) counteracts the adipogenic effects of statil, on both intracellular lipid accumulation and expression of transcripts for proadipogenic factors C/EBPα and PPARγ after treatment for 6 days <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	Cloprostenol sodium salt (25 μg) decreases plasma progesterone in pregnant rats <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

- [1]. Salazar H, et al. Luteolytic effects of a prostaglandin analogue, cloprostenol (ICI 80,996), in rats: ultrastructural and biochemical observations. Biol Reprod. 1976 May;14(4):458-72.
- [2]. Pastel E, et al. Aldose reductases influence prostaglandin F<sub>2</sub>α levels and adipocyte differentiation in male mouse and human species. Endocrinology. 2015 May;156(5):1671-84.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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