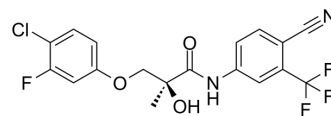


## S-23

<b>Cat. No.:</b>	HY-112257		
<b>CAS No.:</b>	1010396-29-8		
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>13</sub> ClF <sub>4</sub> N <sub>2</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	416.75		
<b>Target:</b>	Androgen Receptor		
<b>Pathway:</b>	Vitamin D Related/Nuclear Receptor		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (239.95 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.3995 mL	11.9976 mL	23.9952 mL
5 mM	0.4799 mL	2.3995 mL	4.7990 mL
10 mM	0.2400 mL	1.1998 mL	2.3995 mL

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

### BIOLOGICAL ACTIVITY

#### Description

S-23 is an orally active selective androgen receptor modulator (SARM) with a K<sub>i</sub> of 1.7 nM. S-23 induces androgen receptor (AR)-mediated transcriptional activation in CV-1 cells. S-23 increases prostate, seminal vesicle, and levator ani muscle weights in castrated rats<sup>[1][2]</sup>.

#### IC<sub>50</sub> & Target

Ki: 1.7 nM (Androgen receptor)<sup>[1]</sup>

#### In Vitro

S-23 induces AR-mediated transcriptional activation in CV-1 cells when used at a concentration of 10 nM<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### In Vivo

By administration of S-23 to castrated animals, androgen-dependent organ weights increased in a dose-dependent manner. The ED<sub>50</sub> of S-23 in the prostate and levator ani muscle is 0.43 and 0.079 mg/d, respectively<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague Dawley rats (in castrated male rats) <sup>[1]</sup>
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Dosage:	0.01-3 mg
Administration:	S.c.; daily for 14 d
Result:	Androgen-dependent organ weights increased in a dose-dependent manner. At a dose rate as low as 0.1 mg/d, S-23 is able to selectively maintain the weight of the levator ani muscle at the intact control level, whereas its effects on the prostate and seminal vesicles are lower than 30% of those observed in intact controls.

## CUSTOMER VALIDATION

- Drug Test Anal. 2021 Oct 29.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Jones A, et al. Preclinical characterization of a (S)-N-(4-cyano-3-trifluoromethyl-phenyl)-3-(3-fluoro, 4-chlorophenoxy)-2-hydroxy-2-methyl-propanamide: a selective androgen receptor modulator for hormonal male contraception. *Endocrinology*. 2009;150(1):38
- [2]. Thevis M, et al. Characterization of in vitro generated metabolites of the selective androgen receptor modulators S-22 and S-23 and in vivo comparison to post-administration canine urine specimens. *Drug Test Anal*. 2010;2(11-12):589-598.

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

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