

Apalutamide

Catalog No: tcsc0885



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

956104-40-8

Formula:

$C_{21}H_{15}F_4N_5O_2S$

Pathway:

Others

Target:

Androgen Receptor

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 83.3 mg/mL (174.48 mM); H₂O :

Alternative Names:

ARN-509

Observed Molecular Weight:

477.43

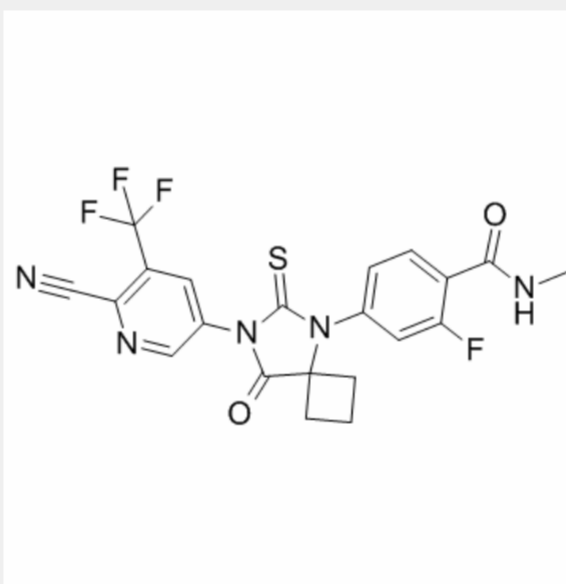
Product Description

Apalutamide (ARN-509) is a potent and competitive **androgen receptor (AR)** antagonist, binding AR with an **IC₅₀** of 16 nM.

IC50 & Target: IC50: 16 nM (Androgen receptor)^[1]

In Vitro: Apalutamide (ARN-509) also exhibits low micromolar affinity (IC₅₀ 3 μM) for the GABA_A receptor in radioligand binding-assays and thus may potentially antagonize GABA_A at therapeutic dose levels^[1]. Apalutamide is a potent androgen receptor (AR) antagonist that targets the AR ligand-binding domain and prevents AR nuclear translocation, DNA binding, and transcription of AR gene targets^[2].

In Vivo: Apalutamide (ARN-509) exhibits low systemic clearance, high oral bioavailability and long plasma half-life in both mouse and dog, supporting once-daily oral dosing. Consistent with its long terminal-half-life, Apalutamide steady-state plasma-levels increases in repeat-dose studies, resulting in high C_{24hr} levels and low peak:trough ratios (ratio:2.5). Castrate male mice bearing LNCaP/AR xenograft tumors are treated with either Apalutamide at doses of 1, 10 or 30 mg/kg/day. Thirteen of 20 Apalutamide (30 mg/kg/day)-treated animals exhibit >50% reduction in tumor-volume at day 28 versus 3 of 19 MDV3100 (30 mg/kg/day)-treated mice [1].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!