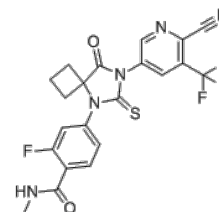


**Product Name** : Apalutamide  
**Cat. No.** : PC-73182  
**CAS No.** : 956104-40-8  
**Molecular Formula** : C<sub>21</sub>H<sub>15</sub>F<sub>4</sub>N<sub>5</sub>O<sub>2</sub>S  
**Molecular Weight** : 477.43  
**Target** : Androgen Receptor (AR)  
**Solubility** : 10 mM in DMSO



## Biological Activity

Apalutamide (ARN-509) is a potent and competitive **androgen receptor (AR)** antagonist with binding IC<sub>50</sub> of 16 nM. Apalutamide (ARN-509) targets the AR ligand-binding domain and prevents AR nuclear translocation, DNA binding, and transcription of AR gene targets, inhibits AR transcriptional activity and prostate cancer cell proliferation. ARN-509 lacked significant agonist activity in preclinical models of CRPC compared to bicalutamide. ARN-509 showed greater efficacy than MDV3100 in a clinically valid murine xenograft model of human CRPC.

## References

- Joseph JD, et al. *Cancer Discov.* 2013 Sep;3(9):1020-9.  
Clegg NJ, et al. *Cancer Res.* 2012 Mar 15;72(6):1494-503.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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