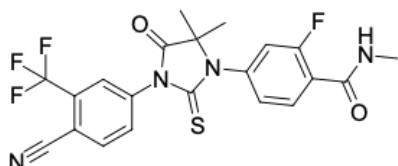


## Enzalutamide

<http://www.lumiprobe.com/p/enzalutamide-915087-33-1>

Enzalutamide is a second-generation androgen receptor (AR) inhibitor with a triple mechanism of action: it competitively binds to the ligand-binding domain of AR, inhibits nuclear translocation of the activated receptor, and blocks its interaction with DNA, thereby suppressing the transcription of genes that promote tumor cell growth. Enzalutamide is used for the treatment of prostate cancer at various stages: in metastatic castration-resistant prostate cancer (mCRPC) following docetaxel chemotherapy, in non-metastatic CRPC with high risk of metastasis, in metastatic hormone-sensitive prostate cancer (mHSPC), and more recently in non-metastatic high-risk biochemical recurrence. Enzalutamide is also used in combination with LHRH agonists (leuprorelin) or as monotherapy in patients with biochemical recurrence. Mechanisms of acquired resistance to enzalutamide are actively studied and include the emergence of constitutively active AR splice variants (AR-V7), activation of PLK1 and FMNL2/SRC kinases, and activation of the Hedgehog signaling pathway. In preclinical studies, enzalutamide is used to investigate resistance mechanisms, explore novel combinations with other targeted agents, and evaluate efficacy in other AR-positive tumors.

This product is intended for research use only.



**Structure of Enzalutamide**

### General properties

Appearance: white solid

Molecular weight: 464.44

CAS number: 915087-33-1

Molecular formula:  $C_{21}H_{16}F_4N_4O_2S$

Solubility: chloroform, DMSO, methanol

Quality control: NMR  $^1H$  and HPLC-MS (98+%)

Storage conditions: 24 months after receipt at  $-20^{\circ}C$  in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.

Legal statement: For research use only, we do not sell to patients, not for medical use.