Enzalutamide

Catalog: 82600
Lot: 240619

Product Information

Description	Enzalutamide is a non-steroidal antiandrogen that inhibits the activity of the androgen receptor to bind to DNA and recruit co-activators.
Background:	Prostate cancer is the most common cancer found in men in the western world. The disease is characterized by several stages, with androgen and AR (androgen receptor) being crucial for tumor growth. Binding of androgen to AR results in transcription of several genes involved in cell proliferation and survival. ADT (androgen deprivation therapy) has the goal of reducing the levels of androgen available by surgery or chemical castration. The use of competitive inhibitors, called antiandrogens, is one of the options. Enzalutamide is a nonsteroidal antiandrogen that inhibits the binding of androgen to AR, AR translocation to the nucleus and binding to DNA. This drug has been approved in 2012 for the treatment of mCRPC (metastatic castration-resistant prostate cancer.
Chemical Name:	4-(3-(4-Cyano-3-(trifluoromethyl)phenyl)-5,5-dimethyl-4-oxo-2-thioxoimidazolidin-1-yl)-2-fluoro-N-methylbenzamide; MDV3100
Molecular Formula:	$C_{21}H_{16}F_4N_4O_2S$
Supplied As:	Solid
Solubility:	Soluble in DMSO (>25 mg/ml)
Storage/Stability:	Upon receipt, store at -20°C. Stable for 1 year from date of receipt, when stored as directed. Solutions are stable for up to 2 months at -20°C.
MW:	464.44 Da
Cas No.	915087-33-1
Purity:	≥99% by HPLC
References:	Ito Y. and Sadar M., 2018 *Res Rep Urol* 10:23-32.

Chemical Structure