## Open Peer Review on Qeios

## Androgen Receptor Antisense Oligonucleotide EZN-4176

National Cancer Institute

## Source

National Cancer Institute. <u>Androgen Receptor Antisense Oligonucleotide EZN-4176</u>. NCI Thesaurus. Code C96742.

A locked nucleic acid (LNA)-based antisense oligonucleotide targeting the androgen receptor (AR) mRNA, with potential antineoplastic activity. Upon administration, EZN-4176 is hybridized and releases the complementary sequences of AR mRNA, thereby blocking translation of the AR protein and inhibiting AR-induced tumor cell growth and promoting tumor cell apoptosis in AR-overexpressing tumor cells. AR is overexpressed in certain breast and prostate cancers and is involved in tumor cell proliferation and survival. LNAs contain a methylene bridge linking 2'-oxygen and 4'-carbon of ribose sugar rings, thereby increasing their thermal stability and decreasing degradation.