## Open Peer Review on Qeios

## Nandrolone Decanoate

National Cancer Institute

## Source

National Cancer Institute. Nandrolone Decanoate. NCI Thesaurus. Code C1172.

The decanoate salt form of nandrolone, an anabolic steroid analog of testosterone with androgenic, anabolic, and erythropoietin stimulating effects. Nandrolone enters the cell and binds to and activates specific nuclear androgen receptors in responsive tissue, including the prostate, seminal vesicles, scrotum, penis, larynx, hair follicles, muscle, and bone. The resulting activated hormone receptor complex translocates into the nucleus and binds to androgen response elements (ARE) in the promoter region of targeted genes, where the complex promotes gene expression necessary for maintaining male sex characteristics. Mimicking the negative feedback mechanism of testosterone, nandrolone decanoate also suppresses the secretion of luteinizing hormone (LH). Furthermore, this agent also stimulates erythropoietin production by enhancing the production of erythropoietic stimulating factors.