Progesterone receptor (PR) is a protein found inside cells, which is activated by the steroid hormone progesterone. In humans, PR is encoded by a single PGR gene residing on chromosome 11q22, it has two main forms, A and B, that differ in their molecular weight. Progesterone is necessary to induce the progesterone receptors. When no binding hormone is present the carboxyl terminal inhibits transcription. Binding to a hormone induces a structural change that removes the inhibitory action. Progesterone antagonists prevent the structural reconfiguration. After progesterone binds to the receptor, restructuring with dimerization follows and the complex enters the nucleus and binds to DNA. There transcription takes place, resulting in formation of messenger RNA that is translated by ribosomes to produce specific proteins. Progesterone receptor plays a central role in diverse reproductive events associated with establishment and maintenance of pregnancy, alveolar development in the breast and sexual behavior.
# Progesterone Receptor Inhibitors & Modulators

## Altrenogest (Allyltrenbolone; RU2267)  
**Cat. No.: HY-80521**

**Bioactivity:** Altrenogest (Allyltrenbolone) is a progestogen structurally related to veterinary steroid trenbolone.

**Purity:** 98.62%  
**Clinical Data:** No Development Reported  
**Size:** 10mM x 1mL in DMSO,  
100 mg, 500 mg

## Chlormadinone acetate  
**Cat. No.: HY-B1095**

**Bioactivity:** Chlormadinone acetate is a steroidal progestin, with antiandrogen and antiestrogenic effects.

**Purity:** 98.0%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO,  
100 mg

## Desogestrel (Org-2969)  
**Cat. No.: HY-12516**

**Bioactivity:** Desogestrel(Org-2969) is a third-generation 19-nortestosterone derivative progestogen, is contained in many oral contraceptive preparations, both combined (COCs) to ethinyl-estradiol (EE) or alone in a progestin-only pill (POP).

**Purity:** 99.33%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO,  
10 mg, 50 mg, 100 mg

## Dienogest (STS 557)  
**Cat. No.: HY-80084**

**Bioactivity:** Dienogest(STS-557) is a specific progesterone receptor agonist with potent oral endometrial activity and is used in the treatment of endometriosis. Target: progesterone receptor agonist Dienogest is an orally active synthetic progesterone (or progestin). It is available for use as an oral..

**Purity:** 99.12%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO,  
10 mg, 50 mg, 100 mg

## Drospirenone (Dihydrospirorenone)  
**Cat. No.: HY-80111**

**Bioactivity:** Drospirenone(Dihydrospirorenone) is a synthetic progestin that is an analog to spironolactone.

**Purity:** 98.45%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO,  
10 mg, 50 mg, 100 mg

## Dydrogesterone  
**Cat. No.: HY-80257A**

**Bioactivity:** Dydrogesterone is a potent, orally active progestogen indicated in a wide variety of gynaecological conditions related to progesterone deficiency.

**Purity:** 99.88%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO,  
10 mg, 50 mg

## Ethynodiol diacetate (Ethynodiol acetate)  
**Cat. No.: HY-81089**

**Bioactivity:** Ethynodiol diacetate is a steroidal progestin which is used as a hormonal contraceptive, it has relatively little or no potency as an androgen,has significant estrogenic effects.

**Purity:** 98.02%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO,  
500 mg

## Gestodene (SHB 331; WL 70)  
**Cat. No.: HY-80110**

**Bioactivity:** Gestodene(SHB 331,WL 70) is a progestogen hormonal contraceptive.

**Purity:** 99.86%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO,  
10 mg, 50 mg, 100 mg

## Gestonorone Capronate (Gestonorone caproate)  
**Cat. No.: HY-U00091**

**Bioactivity:** Gestonorone Capronate is a progestin for the treatment of benign prostatic hypertrophy and endometrial cancer.

**Purity:** >98%  
**Clinical Data:** No Development Reported  
**Size:** 5 mg

## Medroxyprogesterone (acetate) (Medroxyprogesterone 17-acetate; MPA)  
**Cat. No.: HY-B0469**

**Bioactivity:** Medroxyprogesterone acetate is a progestin, a synthetic variant of the human hormone progesterone and a potent progesterone receptor agonist. Target: Progesterone Receptor Medroxyprogesterone acetate(MPA) is a steroidal progestin, a synthetic variant of the human hormone progesterone. It is...

**Purity:** 99.82%  
**Clinical Data:** Phase 4  
**Size:** 10mM x 1mL in DMSO,  
100 mg, 500 mg
| **Megestrol Acetate**  
**Cat. No.: HY-13676** | **Bioactivity:** Megestrol Acetate is a synthetic progestational agent with an IC₅₀ of 260 μM for the inhibition of HegG2. Target: Progesterone Receptor Megestrol acetate, also known as 17α-acetoxy-6-dehydro-6-methylpregesterone, and sometimes abbreviated as MGA or MA, is a steroidal progestin and...

| **Purity:** 98.0%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 1 g, 5 g |

| **Mifepristone**  
**(RU486; RU 38486)  
**Cat. No.: HY-13683** | **Bioactivity:** Mifepristone is a progesterone receptor (PR) and glucocorticoid receptor (GR) antagonist with IC₅₀ of 0.2 nM and 2.6 nM in vitro assay.

| **Purity:** 98.17%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg |

| **Nestoron**  
**(Elometrine; Nestorone; ST-1435)  
**Cat. No.: HY-13071** | **Bioactivity:** Nestoron(ST1435, Elometrine) is a 19-norprogesterone derivative and steroidal progestin which is used as a hormonal contraceptive, a high-affinity agonist of the progesterone receptor.

| **Purity:** 99.41%  
**Clinical Data:** Phase 3  
**Size:** 10mM x 1mL in DMSO, 10 mg, 50 mg |

| **Nomegestrol**  
**Cat. No.: HY-105634** | **Bioactivity:** Nomegestrol is a potent and orally available progestin, acts as a selective full progesterone receptor agonist with a Kᵦᵦ of 5.44 nM for rat uterine progesterone receptor, and has moderate antiandrogenic activity and strong antiestrogenic activity.

| **Purity:** >98%  
**Clinical Data:** Launched  
**Size:** 250 mg, 500 mg |

| **Norethindrone acetate**  
**(19-Norethindrone acetate)  
**Cat. No.: HY-B1710** | **Bioactivity:** Norethindrone acetate is a female progestin approved by FDA for the treatment of endometriosis, uterine bleeding caused by abnormal hormone levels, and secondary amenorrhea.

| **Purity:** 99.33%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg |

| **Progesterone**  
**(Preg-4-ene-3,20-dione)  
**Cat. No.: HY-N0437** | **Bioactivity:** Progesterone is a steroid hormone that regulates the menstrual cycle and is crucial for pregnancy.

| **Purity:** 98.79%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 100 mg, 1 g, 5 g |

| **Tanaproget**  
**(NSP-989)  
**Cat. No.: HY-15606** | **Bioactivity:** Tanaproget(NSP989) is a novel nonsteroidal progesterone receptor agonist which can bind to the PR from various species with a higher relative affinity than reference steroidal progestins.

| **Purity:** 98.99%  
**Clinical Data:** No Development Reported  
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg |

| **Ulpistic acetate**  
**(CDB-2914)  
**Cat. No.: HY-16508** | **Bioactivity:** Ulpistic acetate is a novel selective progesterone receptor modulator (SPRM) for the treatment of benign gynecological conditions such as uterine myoma.

| **Purity:** 99.93%  
**Clinical Data:** Launched  
**Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg |