

产品名称：阿托西班
 产品别名：Atosiban; RW22164; RWJ22164

生物活性：

Description

Atosiban(RW22164; Tractocile) is a nonapeptide, desamino-oxytocin analogue, and a competitive vasopressin/oxytocin receptor antagonist (VOTra). Atosiban inhibits the oxytocin-mediated release of inositol trisphosphate from the myometrial cell membrane. IC50 value: Target: As a result, there is reduced release of intracellular, stored calcium from the sarcoplasmic reticulum of myometrial cells, and reduced influx of Ca²⁺ from the extracellular space through voltage gated channels. In addition, atosiban suppresses oxytocin-mediated release of PGE and PGF from the decidua.[1][2] In human pre-term labour, atosiban, at the recommended dosage, antagonises uterine contractions and induces uterine quiescence. The onset of uterus relaxation following atosiban is rapid, uterine contractions being significantly reduced within 10 minutes to achieve stable uterine quiescence.

Solvent&Solubility

In Vitro:

H₂O : 16.67 mg/mL (16.77 mM; Need ultrasonic)

DMSO : ≥ 16.67 mg/mL (16.77 mM)

* "≥" means soluble, but saturation unknown.

| | Solvent Concentration | Mass | 1 mg | 5 mg | 10 mg |
|-----------------|--------------------------|------|-----------|-----------|------------|
| | | | | | |
| Preparing | 1 mM | | 1.0058 mL | 5.0292 mL | 10.0584 mL |
| Stock Solutions | 5 mM | | 0.2012 mL | 1.0058 mL | 2.0117 mL |
| | 10 mM | | 0.1006 mL | 0.5029 mL | 1.0058 mL |

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限 -80℃, 6 months; -20℃, 1 month。 -80℃ 储存时，请在 6 个月内使用，-20℃ 储存时，请在 1 个月内使用。

In Vivo:

请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 *In Vitro* 方式配制澄清的储备液，再依次添加助溶剂：

——为保证实验结果的可靠性，澄清的储备液可以根据储存条件，适当保存；体内实验的工作液，建议您现用现配，当天使用；以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比；如在配制过程中出现沉淀、析出现象，可以通过加热和/或超声的方式助溶

1.请依序添加每种溶剂： 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline

Solubility: ≥ 1.67 mg/mL (1.68 mM); Clear solution

此方案可获得 ≥ 1.67 mg/mL (1.68 mM, 饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100 μL 16.699999 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入 50 μL Tween-80，混合均匀；然后继续加入 450 μL 生理盐水定容至 1 mL。

2.请依序添加每种溶剂： 10% DMSO→ 90% (20% SBE-β-CD in saline)

Solubility: ≥ 1.67 mg/mL (1.68 mM); Clear solution

此方案可获得 ≥ 1.67 mg/mL (1.68 mM, 饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100 μL 16.699999 mg/mL 的澄清 DMSO 储备液加到 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中，混合均匀。

| | |
|------------|---|
| | <p>3.请依序添加每种溶剂： 10% DMSO →90% corn oil</p> <p>Solubility: ≥ 1.67 mg/mL (1.68 mM); Clear solution</p> <p>此方案可获得 ≥ 1.67 mg/mL (1.68 mM, 饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。</p> <p>以 1 mL 工作液为例，取 100 μL 16.699999 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。</p> |
| References | <p>[1]. <u>Sanu O, et al. Critical appraisal and clinical utility of atosiban in the management of preterm labor. Ther Clin Risk Manag. 2010 Apr 26;6:191-9.</u></p> <p>[2]. <u>Akerlund M, et al. The effect on the human uterus of two newly developed competitive inhibitors of oxytocin and vasopressin. Acta Obstet Gynecol Scand. 1985;64(6):499-504.</u></p> |



源叶生物