

RAR/RXR

Retinoic acid receptors; Retinoid X receptors

HDAC Inhibitor:
Vorinostat (SAHA)



HDAC (Histone deacetylase)

The nuclear retinoic acid receptors (RARs) are transcriptional transregulators, which control the expression of specific gene subsets subsequently to ligand binding and to strictly controlled phosphorylation processes. RARs consist of three subtypes, α (NR1B1), β (NR1B2) and γ (NR1B3), encoded by separate genes. RARs function as ligand-dependent transcriptional regulators, heterodimerized with retinoid X receptors (RXRs), which also consist of three types, α NR2B1, β (NR2B2) and γ (NR2B3). RARs play critical roles in a variety of biological processes, including development, reproduction, immunity, organogenesis and homeostasis, as assessed by vitamin A-deficiency (VAD), pharmacological and genetic studies

conducted in the mouse.

Retinoid X receptor (RXR) belongs to a family of ligand-activated transcription factors that regulate many aspects of metazoan life. A class of nuclear receptors requires RXR as heterodimerization partner for their function.

RAR/RXR Inhibitors & Modulators

<p>(+)-Talarozole</p> <p style="text-align: right;">Cat. No.: HY-14802C</p> <p>Bioactivity: (+)-Talarozole is a potent inhibitor of retinoic acid metabolism extracted from patent WO 1997049704 A1.</p> <p>Purity: 99.28% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg</p> 	<p>(-)-Talarozole</p> <p style="text-align: right;">Cat. No.: HY-14802D</p> <p>Bioactivity: (-)-Talarozole is a potent inhibitor of retinoic acid metabolism extracted from patent WO 1997049704 A1.</p> <p>Purity: 98.02% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg</p> 
<p>AC-55649</p> <p style="text-align: right;">Cat. No.: HY-108526</p> <p>Bioactivity: AC-55649 is a potent, highly isoform-selective agonist of human RARβ2 receptor, with a pEC₅₀ of 6.9.</p> <p>Purity: 99.93% Clinical Data: No Development Reported Size: 5 mg, 10 mg, 25 mg</p> 	<p>Acitretin (Ro 10-1670)</p> <p style="text-align: right;">Cat. No.: HY-B0107</p> <p>Bioactivity: Acitretin(Ro 10-1670) is a second-generation, systemic retinoid that has been used in the treatment of psoriasis.</p> <p>Purity: 99.56% Clinical Data: Launched Size: 10mM x 1mL in DMSO, 100 mg, 200 mg, 500 mg</p> 
<p>Acitretin sodium (Ro 10-1670 sodium)</p> <p style="text-align: right;">Cat. No.: HY-B0107A</p> <p>Bioactivity: Acitretin sodium(Ro 10-1670) is a second-generation, systemic retinoid that has been used in the treatment of psoriasis.</p> <p>Purity: >98% Clinical Data: Launched Size: 100 mg, 200 mg, 500 mg</p> 	<p>Adapalene (CD271)</p> <p style="text-align: right;">Cat. No.: HY-B0091</p> <p>Bioactivity: Adapalene(CD-271; Differin), a synthetic retinoid, is a retinoic acid receptor agonist (RAR).</p> <p>Purity: 98.0% Clinical Data: Launched Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 500 mg</p> 
<p>Adapalene sodium salt (CD 271 sodium salt)</p> <p style="text-align: right;">Cat. No.: HY-B0091A</p> <p>Bioactivity: Adapalene sodium salt(CD 271; Differin), a synthetic retinoid, is a Retinoic acid receptor agonist (RAR).</p> <p>Purity: >98% Clinical Data: Launched Size: 50 mg, 100 mg, 500 mg</p> 	<p>AGN 193109</p> <p style="text-align: right;">Cat. No.: HY-U00449</p> <p>Bioactivity: AGN 193109 is a retinoid analog, and acts as a specific and highly effective antagonist of retinoic acid receptors (RARs), with K_ds of 2 nM, 2 nM, and 3 nM for RARα, RARβ, and RARγ, respectively.</p> <p>Purity: 98.50% Clinical Data: No Development Reported Size: 5 mg, 10 mg, 25 mg</p> 
<p>AGN 194078</p> <p style="text-align: right;">Cat. No.: HY-100273</p> <p>Bioactivity: AGN 194078 is a selective RARα agonist with a K_d and EC₅₀ of 3 and 112 nM, respectively.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg</p> 	<p>AGN 194310 (VTP-194310)</p> <p style="text-align: right;">Cat. No.: HY-16681</p> <p>Bioactivity: AGN 194310(VTP-194310) is a potent and selective pan-RARs agonist with K_d values of 3/2/5 nM for RARα/β/γ respectively.</p> <p>Purity: 98.02% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg</p> 

<p>AGN 195183</p> <p style="text-align: right;">Cat. No.: HY-16684</p>	<p>AGN 196996</p> <p style="text-align: right;">Cat. No.: HY-16682</p>
<p>Bioactivity: AGN 195183 is a potent and selective agonist of RARα(Kd=3 nM) with improved binding selectivity relative to AGN 193836; no activity on RARβ/γ. IC50 value: 3 nM (Kd); 200 nM (EC80, RAR Trans.) Target: RARα agonist Compound 4(AGN-195183) inhibited the growth of breast cancer cell lines, and was inactive in an...</p> <p>Purity: 98.40%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg</p> 	<p>Bioactivity: AGN 196996 is a potent and selective RARα antagonist with Ki value of 2 nM; little binding affinity for RARβ(Ki=1087 nM) and RARγ(Ki=8523 nM).</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 250 mg, 500 mg</p> 
<p>AGN 205327</p> <p style="text-align: right;">Cat. No.: HY-16685</p>	<p>AGN 205728</p> <p style="text-align: right;">Cat. No.: HY-16683</p>
<p>Bioactivity: AGN 205327 is a potent synthetic RARs agonist with EC50 of 3766/734/32 nM for RAR$\alpha/\beta/\gamma$ respectively; no inhibition on RXR.</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 5 mg, 10 mg</p> 	<p>Bioactivity: AGN 205728 is a potent and selective RARγ antagonist with Ki/IC95 values of 3 nM/ 0.6 nM; no inhibition on RARα and RARβ.</p> <p>Purity: >98%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 250 mg, 500 mg</p> 
<p>AM580 (CD336; NSC608001; Ro 40-6055)</p> <p style="text-align: right;">Cat. No.: HY-10475</p>	<p>AR7</p> <p style="text-align: right;">Cat. No.: HY-101106</p>
<p>Bioactivity: AM580 is a selective RARα agonist with IC₅₀ and EC₅₀ of 8 nM and 0.36 nM, respectively.</p> <p>Purity: 99.41%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg</p> 	<p>Bioactivity: AR7 is a retinoic acid receptor α (RARα) antagonist.</p> <p>Purity: 98.77%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 
<p>Bexarotene (LGD1069)</p> <p style="text-align: right;">Cat. No.: HY-14171</p>	<p>CD437 (AHPN)</p> <p style="text-align: right;">Cat. No.: HY-100532</p>
<p>Bioactivity: Bexarotene (LGD1069) is a selective retinoid X receptors (RXR) agonist for the treatment of cutaneous T-cell lymphoma.</p> <p>Purity: 99.81%</p> <p>Clinical Data: Launched</p> <p>Size: 10mM x 1mL in DMSO, 50 mg, 100 mg, 500 mg</p> 	<p>Bioactivity: CD437 is a selective Retinoic Acid Receptor γ (RARγ) agonist.</p> <p>Purity: 98.0%</p> <p>Clinical Data: No Development Reported</p> <p>Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</p> 
<p>Fenretinide (4-HPR)</p> <p style="text-align: right;">Cat. No.: HY-15373</p>	<p>Isotretinoin (13-cis-Retinoic acid)</p> <p style="text-align: right;">Cat. No.: HY-15127</p>
<p>Bioactivity: Fenretinide is a synthetic retinoid derivative, binding to the retinoic acid receptors (RAR) at concentrations necessary to induce cell death.</p> <p>Purity: 99.41%</p> <p>Clinical Data: Phase 3</p> <p>Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg</p> 	<p>Bioactivity: Isotretinoin(13-cis-Retinoic acid) is a medication used for the treatment of severe acne. It was first developed to be used as a chemotherapy medication for the treatment of brain cancer, pancreatic cancer and more. Target: RAR/RXR</p> <p>Isotretinoin has been the most effective and long-lasting drug...</p> <p>Purity: 94.86%</p> <p>Clinical Data: Launched</p> <p>Size: 10mM x 1mL in DMSO, 100 mg, 500 mg</p> 

<p>LG-100064 Cat. No.: HY-104070</p> <p>Bioactivity: LG-100064 is a retinoid-X-receptor (RXR) agonist, with EC₅₀s of 330 nM, 200 nM, and 260 nM for RXRα, RXRβ and RXRγ; LG-100064 can be used in the research of cancer.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 500 mg, 250 mg</p> 	<p>LY2955303 Cat. No.: HY-107765</p> <p>Bioactivity: LY2955303 is a potent and selective retinoic acid receptor gamma (RARγ) antagonist with a K_i of 1.09 nM.</p> <p>Purity: 98.25% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg</p> 
<p>Magnolol Cat. No.: HY-N0163</p> <p>Bioactivity: Magnolol, a natural lignan isolated from the stem bark of Magnolia officinalis, is a dual agonist of both RXRα and PPARγ, with EC₅₀ values of 10.4 μM and 17.7 μM, respectively.</p> <p>Purity: 99.72% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg</p> 	<p>Palovarotene (R 667; Ro 3300074) Cat. No.: HY-14799</p> <p>Bioactivity: Palovarotene is a nuclear retinoic acid receptor γ (RAR-γ) agonist.</p> <p>Purity: 99.16% Clinical Data: Phase 3 Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 100 mg</p> 
<p>Retinoic acid (ATRA; Tretinoin; Vitamin A acid; all-trans-Retinoic acid) Cat. No.: HY-14649</p> <p>Bioactivity: Retinoic acid is a metabolite of vitamin A that plays important roles in cell growth, differentiation, and organogenesis. Retinoic acid is a natural agonist of RAR nuclear receptors, with IC₅₀s of 14 nM for RARα/β/γ. Retin...</p> <p>Purity: 98.36% Clinical Data: Launched Size: 10mM x 1mL in DMSO, 100 mg, 500 mg, 1 g, 5 g</p> 	<p>Tamibarotene (Am 80) Cat. No.: HY-14652</p> <p>Bioactivity: Tamibarotene is a retinoic acid receptor α/β (RARα/β) agonist, showing high selectivity over RARγ.</p> <p>Purity: 99.77% Clinical Data: Launched Size: 10mM x 1mL in DMSO, 10 mg, 50 mg</p> 
<p>Tarenflurbil (R)-Flurbiprofen; MPC7869) Cat. No.: HY-10291</p> <p>Bioactivity: Tarenflurbil ((R)-Flurbiprofen) is the R-enantiomer of the racemate NSAID Flurbiprofen, Tarenflurbil ((R)-Flurbiprofen) inhibits the binding of [³H]9-cis-RA to RXRα LBD with IC₅₀ of 75 μM.</p> <p>Purity: 99.99% Clinical Data: Phase 2 Size: 10mM x 1mL in DMSO, 100 mg</p> 	<p>Tazarotene (AGN 190168) Cat. No.: HY-15388</p> <p>Bioactivity: Tazarotene (AGN 190168) is a selective retinoic acid receptor (RAR) agonist for the treatment of plaque psoriasis and acne vulgaris.</p> <p>Purity: 98.68% Clinical Data: Launched Size: 10 mg, 50 mg, 100 mg</p> 
<p>Trifarotene (CD5789) Cat. No.: HY-100256</p> <p>Bioactivity: Trifarotene is a retinoic acid receptor (RAR) agonist with K_d^{APP} of 2, 15 and 500 nM for RARγ, RARβ and RARα, respectively.</p> <p>Purity: >98% Clinical Data: No Development Reported Size: 1 mg, 5 mg, 10 mg</p> 	<p>TTNPB (Ro 13-7410; Arotinoid acid; AGN191183) Cat. No.: HY-15682</p> <p>Bioactivity: TTNPB is a highly potent RAR agonist. Competitive binding assays using human RARs yield IC₅₀s of α=5.1 nM, β= 4.5 nM, and γ=9.3 nM, respectively.</p> <p>Purity: 99.31% Clinical Data: No Development Reported Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg</p> 

UVI 3003

Cat. No.: HY-107500

Bioactivity: UVI 3003 is a highly selective antagonist of **retinoid X receptor (RXR)**, and inhibits xenopus and human **RXR α** in Cos7 cells, with **IC₅₀s** of 0.22 and 0.24 μ M, respectively.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg

