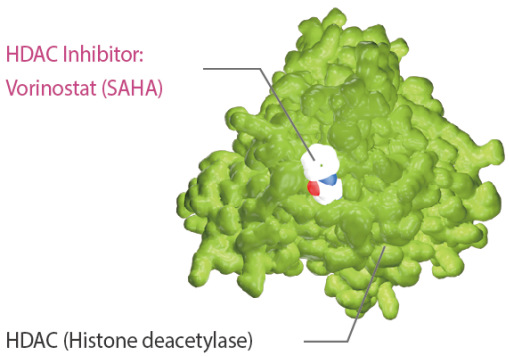
Angiotensin-converting Enzyme (ACE)



Angiotensin-converting enzyme (ACE) indirectly increases blood pressure by causing blood vessels to constrict. ACE does that by converting angiotensin I to angiotensin II, which constricts the vessels. ACE, angiotensin I and angiotensin II are part of the renin-angiotensin system (RAS), which controls blood pressure by regulating the volume of fluids in the body. ACE is secreted in the lungs and kidneys by cells in the endothelium (inner layer) of blood vessels. It has two primary functions: ACE catalyses the conversion of angiotensin I to angiotensin II, a potent vasoconstrictor in a substrate concentration-dependent manner. ACE degrades bradykinin, a potent vasodilator, and other vasoactive peptides. These two actions make ACE inhibition a goal in the treatment of conditions such as high blood pressure, heart failure, diabetic nephropathy, and type 2 diabetes mellitus. Inhibition of ACE (by ACE inhibitors) results in the decreased formation of angiotensin II and decreased metabolism of bradykinin, leading to systematic dilation of the arteries and veins and a decrease in arterial blood pressure.

Angiotensin-converting Enzyme (ACE) Inhibitors & Modulators

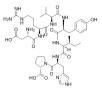
Angiotensin 1-7

(Angiotensin-(1-7); Ang-(1-7))

Cat. No.: HY-12403

Bioactivity: Angiotensin (1-7) inhibits purified canine angiotensin converting enzyme (**ACE**) activity with an $\mathbf{IC_{50}}$ of 0.65 μM.

Purity: 99.61%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 5 mg, 10 mg, 25 mg, 50 mg

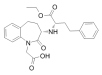


Benazepril

Cat. No.: HY-B0093

Bioactivity: Benazepril, an angiotensin converting enzyme inhibitor, which is a medication used to treat high blood pressure.

Purity: >98%
Clinical Data: Launched
Size: 1 g, 5 g



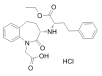
Benazepril hydrochloride

(CGS14824A)

Cat. No.: HY-B0093A

Bioactivity: Benazepril hydrochloride, an angiotensin converting enzyme inhibitor, which is a medication used to treat high blood pressure. Target: angiotensin converting enzyme (ACE) Benazepril hydrochloride is a medication used to treat high blood pressure (hypertension), congestive heart failure, and...

Purity: 99.85%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g



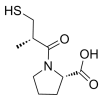
Captopril

(SQ-14534; SA333)

Cat. No.: HY-B0368

Bioactivity: Captopril (SQ-14534) is a potent, competitive inhibitor of angiotensin-converting enzyme (ACE).

Purity: 98.05%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg



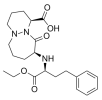
Cilazapril

(Ro 31-2848)

Cat. No.: HY-A0043

Bioactivity: Cilazapril is a angiotensin-converting enzyme (ACE) inhibitor used for the treatment of hypertension and congestive heart failure.

Purity: >98%
Clinical Data: Launched
Size: 10 mg, 50 mg, 100 mg



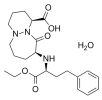
Cilazapril monohydrate

(Ro 31-2848 monohydrate)

Cat. No.: HY-A0043A

Bioactivity: Cilazapril Monohydrate is a angiotensin-converting enzyme (ACE) inhibitor used for the treatment of hypertension and congestive heart failure.

Purity: 98.63%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg



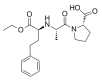
Enalapril

(MK-421)

Cat. No.: HY-B0331

Bioactivity: Enalapril (MK-421) is an angiotensin converting enzyme (ACE) inhibitor.

Purity: >98%
Clinical Data: Launched
Size: 1 g, 5 g



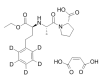
Enalapril D5 maleate

(MK-421 (D5 maleate))

Cat. No.: HY-B0331AS

Bioactivity: Enalapril (D5 maleate) (MK-421 (D5 maleate)) is deuterium labeled Enalapril, which is an angiotensin converting enzyme (ACE) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg



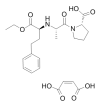
Enalapril maleate

(MK-421 (maleate))

Cat. No.: HY-B0331A

Bioactivity: Enalapril (maleate) (MK-421 (maleate)), the active metabolite of enalapril, is an angiotensin-converting enzyme (ACE) inhibitor.

Purity: 99.96%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 1 g, 5 g



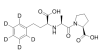
Enalaprilat D5

(MK-422 D5)

Cat. No.: HY-B0231AS

Bioactivity: Enalaprilat D5 is the deuterium labeled Enalaprilat(MK-422), which is an angiotensin-converting enzyme (ACE) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg

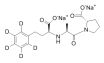


Enalaprilat D5 Sodium Salt

(MK-422 D5 Sodium Salt) **Cat. No.:** HY-B0231BS

Bioactivity: Enalaprilat D5 Sodium Salt is the deuterium labeled Enalaprilat(MK-422), which is an angiotensin-converting enzyme (ACE) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

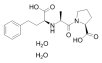


Enalaprilat dihydrate

(MK-422) **Cat. No.:** HY-B0231

Bioactivity: Enalaprilat (dihydrate) (MK-422) is an angiotensin-converting enzyme (ACE) inhibitor with IC_{50} of 1.94 nM.

Purity: 99.0%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 50 mg, 100 mg

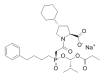


Fosinopril sodium

(SQ28555) **Cat. No.:** HY-B0382

Bioactivity: Fosinopril Sodium is the ester prodrug of an angiotensin-converting enzyme (ACE) inhibitor, used for the treatment of hypertension and some types of chronic heart failure. Target: ACE Fosinopril is a phosphinic acid-containing ester prodrug that belongs to the...

Purity: 98.0%
Clinical Data: Launched
Size: 10mM x 1mL in Water, 50 mg, 100 mg

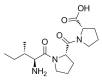


H-Ile-Pro-Pro-OH

Cat. No.: HY-114424

Bioactivity: H-Ile-Pro-Pro-OH, a milk-derived peptide [1], inhibits angiotensin-converting enzyme (**ACE**) [1] with an $\mathbf{IC_{50}}$ of 5 μM [2]. Antihypertensive tripeptides [1].

Purity: >98%
Clinical Data: No Development Reported
Size: 10 mg

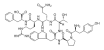


Hemorphin-7

Cat. No.: HY-P0318

Bioactivity: Hemorphin-7 is a hemorphin peptide, an endogenous opioid peptide derived from the β-chain of hemoglobin. Hemorphin peptides exhibits antinociceptive and antihypertensive activities, activating opioid receptors and inhibiting angiotensin-converting enzyme (ACE).

Purity: 99.65%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

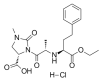


Imidapril hydrochloride

(TA-6366) **Cat. No.:** HY-B1451

Bioactivity: Imidapril Hydrochloride is the hydrochloride salt of Imidapril, an angiotensin-converting enzyme (ACE) inhibitor with antihypertensive activity.

Purity: 99.95%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg

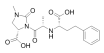


Imidaprilate

(6366A; Imidaprilat) **Cat. No.:** HY-109592

Bioactivity: Imidaprilate is an active metabolite of TA-6366, acts as a potent angiotensin converting enzyme (**ACE**) inhibitor, with an $\mathbf{IC_{50}}$ of 2.6 nM, and is used in the research of hypertensive disease.

Purity: >98%
Clinical Data: No Development Reported
Size: 250 mg, 500 mg

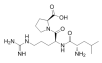


Leucylarginylproline

Cat. No.: HY-P0143

Bioactivity: Leucylarginylproline is an angiotensin-converting enzyme (**ACE**) inhibitor with an $\mathbf{IC_{50}}$ of 0.27μM.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

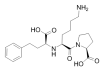


Lisinopril

(MK-521) **Cat. No.:** HY-18206

Bioactivity: Lisinopril (MK-521) is angiotensin-converting enzyme inhibitor, used in treatment of hypertension, congestive heart failure, and heart attacks.

Purity: >98%
Clinical Data: Launched
Size: 1 g, 5 g

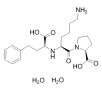


Lisinopril dihydrate

(MK-521 (dihydrate)) **Cat. No.:** HY-18206A

Bioactivity: Lisinopril Dihydrate is angiotensin-converting enzyme inhibitor, used in treatment of hypertension, congestive heart failure, and heart attacks. Target: ACE Lisinopril is a potent, competitive inhibitor of angiotensin-converting enzyme (ACE), the enzyme responsible for the conversion of...

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

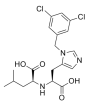


MLN-4760

Cat. No.: HY-19414

Bioactivity: MLN-4760 is a potent and selective human **ACE2** inhibitor (**IC_{50}**, 0.44 nM), with excellent selectivity (>5000-fold) versus related enzymes including human testicular ACE (**IC_{50}**

Purity: >98%
Clinical Data: No Development Reported
Size: 500 mg, 250 mg



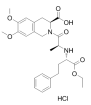
Moexipril hydrochloride

(RS-10085)

Cat. No.: HY-B0378A

Bioactivity: Moexipril HCl is a potent orally active non-sulfhydryl angiotensin converting enzyme(ACE) inhibitor, which is used for the treatment of hypertension and congestive heart failure.

Purity: 98.49%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

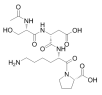


N-Acetyl-Ser-Asp-Lys-Pro

Cat. No.: HY-P0266

Bioactivity: N-Acetyl-Ser-Asp-Lys-Pro is a natural and specific substrate for the N-terminal site of **ACE**.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 25 mg

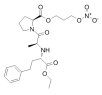


NCX899

Cat. No.: HY-101577

Bioactivity: NCX899 is a NO-releasing derivative of enalapril, and shows inhibitory activity against **angiotensin-converting enzyme (ACE)** activity.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



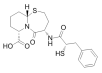
Omapatrilat

(BMS-186716)

Cat. No.: HY-18208

Bioactivity: Omapatrilat is a dual inhibitor of the metalloproteases **ACE** and **NEP** with **K_i** values of 0.64 and 0.45 nM, respectively.

Purity: 97.22%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg



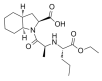
Perindopril

(S-9490)

Cat. No.: HY-B0130

Bioactivity: Perindopril is a long-acting ACE inhibitor of which is used to treat high blood pressure, heart failure or stable coronary artery disease. Target: ACE Perindopril is a long-acting ACE inhibitor. It is used to treat high blood pressure, heart failure or stable coronary artery disease in form of...

Purity: >98%
Clinical Data: Launched
Size: 100 mg, 500 mg



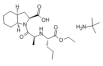
Perindopril erbumine

(Perindopril tert-butylamine salt; S-9490 (erbumine))

Cat. No.: HY-B0130A

Bioactivity: Perindopril erbumine is a potent ACE inhibitor of which is used to treat high blood pressure, heart failure or stable coronary artery disease. Target: ACE Perindopril is a long-acting ACE inhibitor. It is used to treat high blood pressure, heart failure or stable coronary artery disease in...

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

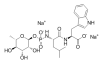


Phosphoramidon Disodium

Cat. No.: HY-N2021A

Bioactivity: Phosphoramidon disodium is a **metalloprotease** inhibitor. Phosphoramidon inhibits endothelin-converting enzyme (**ECE**), neutral endopeptidase (**NEP**), and angiotensin-converting enzyme (**ACE**) with **IC_{50}** values of 3.5, 0.034, and 78 μM, respectively.

Purity: 98.0%
Clinical Data: No Development Reported
Size: 10mM x 1mL in Water, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg



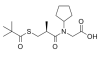
Pivalopril

(Pivopril; RHC 3659(S))

Cat. No.: HY-U00041

Bioactivity: Pivalopril is a new orally active angiotensin converting enzyme (**ACE**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg



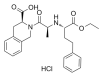
Quinapril hydrochloride

(CI-906)

Cat. No.: HY-B0477

Bioactivity: Quinapril (hydrochloride) (CI-906) is a prodrug that belongs to the angiotensin-converting enzyme (ACE) inhibitor class of medications.

Purity: 99.10%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

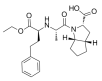


Ramipril
(HOE-498)

Cat. No.: HY-B0279

Bioactivity: Ramipril (HOE-498) is an angiotensin-converting enzyme (ACE) inhibitor with IC_{50} of 5 nM.

Purity: 99.81%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

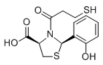


Rentiapril
(SA-446)

Cat. No.: HY-106446

Bioactivity: Rentiapril is an orally active **angiotensin converting enzyme (ACE)** inhibitor with antihypertensive activity [1] [2].

Purity: >98%
Clinical Data: No Development Reported
Size:

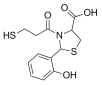


Rentiapril racemate
(SA-446 racemate)

Cat. No.: HY-U00074

Bioactivity: Rentiapril racemate (SA-446 racemate) is the less active racemate of Rentiapril. Rentiapril is an **angiotensin converting enzyme** (**ACE**) inhibitor.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

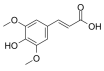


Sinapinic acid
(Sinapic acid)

Cat. No.: HY-W009732

Bioactivity: Sinapinic acid (Sinapic acid) is a phenolic compound isolated from Hydnophytum formicarum Jack. Rhizome, acts as an inhibitor of **HDAC**, with an $\mathbf{IC_{50}}$ of 2.27 mM [1], and also inhibits **ACE-I** activity [2]. Sinapinic acid posssess pot...

Purity: 99.61%
Clinical Data: No Development Reported
Size: 10mM x 1mL in DMSO, 100 mg

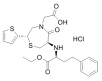


Temocapril hydrochloride

Cat. No.: HY-B0384

Bioactivity: Temocapril Hydrochloride is a long-acting angiotensin-converting enzyme (ACE) inhibitor, used for the treatment of hypertension.

Purity: 99.52%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg

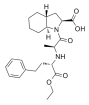


Trandolapril
(RU44570)

Cat. No.: HY-B0592

Bioactivity: Trandolapril(RU44570) is an ACE inhibitor used to treat high blood pressure. Target: ACE Trandolapril is an ACE inhibitor used to treat high blood pressure, it may also be used to treat other conditions. Trandolapril acts by competitive inhibition of Angiotensin Converting Enzyme (ACE), a key...

Purity: 98.01%
Clinical Data: Launched
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

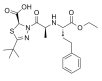


Utibapril
(FPL 63547)

Cat. No.: HY-101681

Bioactivity: Utibapril is an **angiotensin-converting enzyme (ACE)** inhibitor with antihypertensive activities.

Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg, 20 mg

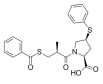


Zofenopril

Cat. No.: HY-108321

Bioactivity: Zofenopril is an **angiotensin-converting enzyme** (**ACE**) inhibitor with an $\mathbf{IC_{50}}$ of 81 μM.

Purity: 98.81%
Clinical Data: Launched
Size: 5 mg



Zofenopril calcium
(SQ26991)

Cat. No.: HY-B0655

Bioactivity: Zofenopril Calcium (SQ26991) is an antioxidant that acts as an angiotensin-converting enzyme inhibitor. Target: ACE Zofenopril Calcium is a pro-drug designed to undergo metabolic hydrolysis yielding the active free sulfhydryl compound zofenoprilat, which is an angiotensin converting enzyme (ACE)...

Purity: 97.91%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg