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)

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

**Purity:** 99.81%

**Clinical Data:**
- **Size:** 10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg

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### Benazepril

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

**Purity:** >98%

**Clinical Data:**
- **Size:** 1 g, 5 g

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### Benazepril (hydrochloride)

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

**Purity:** 99.99%

**Clinical Data:**
- **Size:** 10mM x 1mL in DMSO, 1 g, 5 g

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### Captopril

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

**Purity:** 99.8%

**Clinical Data:**
- **Size:** 10mM x 1mL in DMSO, 100 mg, 500 mg

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### Cilazapril

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

**Purity:** >98%

**Clinical Data:**
- **Size:** 10 mg, 50 mg, 100 mg

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### Cilazapril (monohydrate)

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

**Purity:** 99.62%

**Clinical Data:**
- **Size:** 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg

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### Enalapril

**Bioactivity:** Enalapril is an angiotensin converting enzyme (ACE) inhibitor.

**Purity:** >98%

**Clinical Data:**
- **Size:** 1 g, 5 g

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### Enalapril (D5 maleate)

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

**Purity:** >98%

**Clinical Data:**
- **Size:** 1 mg, 5 mg

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### Enalapril (maleate)

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

**Purity:** 98.88%

**Clinical Data:**
- **Size:** 10mM x 1mL in DMSO, 1 g, 5 g

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### Enalaprilat (dihydrate)

**Bioactivity:** Enalaprilat is an angiotensin-converting enzyme (ACE) inhibitor with IC$_{50}$ of 1

**Purity:** 99.81%

**Clinical Data:**
- **Size:** 10mM x 1mL in DMSO, 50 mg, 100 mg
| **Enalaprilat D5**  
* (MK-422 D5) | **Cat. No.: HY-80231A5**  
**Bioactivity:** Enalaprilat D5 is the deuterium labeled Enalaprilat(MK-422), which is an angiotensin-converting enzyme (ACE) inhibitor.  
**Purity:** >98%  
**Clinical Data:**  
Size: 1 mg |
|---|---|
| **Enalaprilat D5 (Sodium Salt)**  
* (MK-422 D5 Sodium Salt) | **Cat. No.: HY-80231BS**  
**Bioactivity:** Enalaprilat D5 Sodium Salt is the deuterium labeled Enalaprilat(MK-422), which is an angiotensin-converting enzyme (ACE) inhibitor.  
**Purity:** >98%  
**Clinical Data:**  
Size: 1 mg, 5 mg, 10 mg |
| **Fosinopril (sodium)**  
* (SQ28555) | **Cat. No.: HY-80382**  
**Bioactivity:** Fosinopril Sodium is the ester produg of an angiotensin-converting enzyme (ACE) inhibitor, used for the treatment of hypertension and some types of chronic heart failure.  
**Purity:** 98.25%  
**Clinical Data:**  
Size: 10mM x 1mL in Water, 50 mg, 100 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:** 99.51%  
**Clinical Data:**  
Size: 10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg |
| **Lisinopril** | **Cat. No.: HY-18206**  
**Bioactivity:** Lisinopril is angiotensin-converting enzyme inhibitor, used in treatment of hypertension, congestive heart failure, and heart attacks.  
**Purity:** >98%  
**Clinical Data:**  
Size: 1 g, 5 g |
| **Lisinopril (dihydrate)** | **Cat. No.: HY-18206A**  
**Bioactivity:** Lisinopril Dihydrate is angiotensin-converting enzyme inhibitor, used in treatment of hypertension, congestive heart failure, and heart attacks.  
**Purity:** 99.34%  
**Clinical Data:**  
Size: 1 g, 5 g |
| **Moexipril (hydrochloride)**  
* (RS10085; RS 10085; 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:** 98.33%  
**Clinical Data:**  
Size: 10mM x 1mL in DMSO, 50 mg, 100 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:** >98%  
**Clinical Data:**  
Size: |
| **Perindopril**  
* (S-9490) | **Cat. No.: HY-80130**  
**Bioactivity:** Perindopril is a long-acting ACE inhibitor of which is used to treat high blood pressure, heart failure or stable coronary artery disease.  
**Purity:** >98%  
**Clinical Data:**  
Size: 100 mg, 500 mg |
| **Perindopril (erbumine)**  
* (Perindopril tert-butylamine salt) | **Cat. No.: HY-80130A**  
**Bioactivity:** Perindopril erbumine is a potent ACE inhibitor of which is used to treat high blood pressure, heart failure or stable coronary artery disease.  
**Purity:** 99.96%  
**Clinical Data:**  
Size: 10mM x 1mL in Water, 100 mg, 500 mg |
Quinapril (hydrochloride)  
Cat. No.: HY-B0477

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

Purity: 99.46%
Clinical Data: Size: 10mM x 1mL in DMSO, 100 mg, 500 mg

Ramipril  
Cat. No.: HY-B0279

Bioactivity: Ramipril is an angiotensin-converting enzyme (ACE) inhibitor with IC50 of 5 nM.

Purity: 99.71%
Clinical Data: Size: 10mM x 1mL in DMSO, 100 mg, 500 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: 99.87%
Clinical Data: 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.

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

Zofenopril (calcium) (SQ26991)  
Cat. No.: HY-B0655

Bioactivity: Zofenopril Calcium (SQ26991) is an antioxidant that acts as an angiotensin-converting enzyme inhibitor.

Purity: 99.63%
Clinical Data: Size: 10mM x 1mL in DMSO, 5 mg, 10 mg, 50 mg, 100 mg