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 IC₅₀ 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-80231AS**  
**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 |
<table>
<thead>
<tr>
<th>Product Name</th>
<th>Cat. No.</th>
<th>Bioactivity</th>
<th>Purity</th>
<th>Clinical Data</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enalaprilat DS Sodium Salt</strong></td>
<td>HY-B0231BS</td>
<td>Enalaprilat DS Sodium Salt is the deuterium labeled Enalaprilat(MK-422), which is an angiotensin-converting enzyme (ACE) inhibitor.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>1 mg, 5 mg, 10 mg</td>
</tr>
<tr>
<td><strong>Enalapril dihydrate</strong></td>
<td>HY-B0231</td>
<td>Enalapril dihydrate (MK-422) is an angiotensin-converting enzyme (ACE) inhibitor with IC$_{50}$ of 1.94 nM.</td>
<td>99.0%</td>
<td>Launched</td>
<td>10mM x 1mL in DMSO, 50 mg, 100 mg</td>
</tr>
<tr>
<td><strong>Fosinopril sodium</strong></td>
<td>HY-B0382</td>
<td>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...</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in Water, 50 mg, 100 mg</td>
</tr>
<tr>
<td><strong>H-Ile-Pro-Pro-OH</strong></td>
<td>HY-114424</td>
<td>H-Ile-Pro-Pro-OH, a milk-derived peptide $^{[1]}$, inhibits angiotensin-converting enzyme (ACE) with an IC$_{50}$ of 5 μM $^{[2]}$. Antihypertensive tripeptides $^{[1]}$.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>10 mg</td>
</tr>
<tr>
<td><strong>Hemorphin-7</strong></td>
<td>HY-P0318</td>
<td>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).</td>
<td>99.65%</td>
<td>No Development Reported</td>
<td>1 mg, 5 mg, 10 mg</td>
</tr>
<tr>
<td><strong>Imidapril hydrochloride</strong></td>
<td>HY-B1451</td>
<td>Imidapril Hydrochloride is the hydrochloride salt of Imidapril, an angiotensin-converting enzyme (ACE) inhibitor with antihypertensive activity.</td>
<td>99.95%</td>
<td>Launched</td>
<td>10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg, 200 mg</td>
</tr>
<tr>
<td><strong>Imidaprilate</strong></td>
<td>HY-109592</td>
<td>Imidaprilate is an active metabolite of TA-6366, acts as a potent angiotensin converting enzyme (ACE) inhibitor, with an IC$_{50}$ of 2.6 nM, and is used in the research of hypertensive disease.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>250 mg, 500 mg</td>
</tr>
<tr>
<td><strong>Leucylarginylproline</strong></td>
<td>HY-P0143</td>
<td>Leucylarginylproline is an angiotensin-converting enzyme (ACE) inhibitor with an IC$_{50}$ of 0.27μM.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>1 mg, 5 mg</td>
</tr>
<tr>
<td><strong>Lisinopril</strong></td>
<td>HY-18206</td>
<td>Lisinopril (MK-521) is angiotensin-converting enzyme inhibitor, used in treatment of hypertension, congestive heart failure, and heart attacks.</td>
<td>&gt;98%</td>
<td>Launched</td>
<td>1 g, 5 g</td>
</tr>
<tr>
<td><strong>Lisinopril dihydrate</strong></td>
<td>HY-18206A</td>
<td>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...</td>
<td>98.0%</td>
<td>Launched</td>
<td>10mM x 1mL in Water, 1 g, 5 g</td>
</tr>
<tr>
<td>Substance</td>
<td>Cat. No.</td>
<td>Bioactivity</td>
<td>Purity</td>
<td>Clinical Data</td>
<td>Size</td>
</tr>
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<td>---------------------------</td>
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</tr>
<tr>
<td>MLN-4760</td>
<td>HY-19414</td>
<td><strong>Bioactivity:</strong> MLN-4760 is a potent and selective human ACE2 inhibitor (IC₅₀ 0.44 nM), with excellent selectivity (&gt;5000-fold) versus related enzymes including human testicular ACE (IC₅₀)</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>500 mg, 250 mg</td>
</tr>
<tr>
<td>Moexipril hydrochloride</td>
<td>HY-80378A</td>
<td><strong>Bioactivity:</strong> 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.</td>
<td>98.49%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 10 mg, 50 mg, 100 mg</td>
</tr>
<tr>
<td>N-Acetyl-Ser-Asp-Lys-Pro</td>
<td>HY-P0266</td>
<td><strong>Bioactivity:</strong> N-Acetyl-Ser-Asp-Lys-Pro is a natural and specific substrate for the N-terminal site of ACE.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>1 mg, 5 mg, 10 mg, 25 mg</td>
</tr>
<tr>
<td>NCX899</td>
<td>HY-101577</td>
<td><strong>Bioactivity:</strong> NCX899 is a NO-releasing derivative of enalapril, and shows inhibitory activity against angiotensin-converting enzyme (ACE) activity.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>No Development Reported</td>
</tr>
<tr>
<td>Omapatrilat (BMS-186716)</td>
<td>HY-18208</td>
<td><strong>Bioactivity:</strong> Omapatrilat is a dual inhibitor of the metalloproteases ACE and NEP with Ki values of 0.64 and 0.45 nM, respectively.</td>
<td>97.22%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg</td>
</tr>
<tr>
<td>Perindopril</td>
<td>HY-B0130</td>
<td><strong>Bioactivity:</strong> 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...</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>100 mg, 500 mg</td>
</tr>
<tr>
<td>Phosphoramidon Disodium</td>
<td>HY-N2021A</td>
<td><strong>Bioactivity:</strong> Phosphoramidon disodium is a metalloproteinase inhibitor. Phosphoramidon inhibits endothelin-converting enzyme (ECE), neutral endopeptidase (NEP), and angiotensin-converting enzyme (ACE) with IC₅₀ values of 3.5, 0.034, and 78 μM, respectively.</td>
<td>No Development Reported</td>
<td>No Development Reported</td>
<td>10mM x 1mL in Water, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg</td>
</tr>
<tr>
<td>Pivalopril (Pivopril; RHC 3659(S))</td>
<td>HY-U00041</td>
<td><strong>Bioactivity:</strong> Pivalopril is a new orally active angiotensin converting enzyme (ACE) inhibitor.</td>
<td>&gt;98%</td>
<td>No Development Reported</td>
<td>1 mg, 5 mg, 10 mg, 20 mg</td>
</tr>
<tr>
<td>Quinapril hydrochloride</td>
<td>HY-B0477</td>
<td><strong>Bioactivity:</strong> Quinapril (hydrochloride) (CI-906) is a prodrug that belongs to the angiotensin-converting enzyme (ACE) inhibitor class of medications.</td>
<td>99.10%</td>
<td>No Development Reported</td>
<td>10mM x 1mL in DMSO, 100 mg, 500 mg</td>
</tr>
</tbody>
</table>

4 Tel: 609-228-6898  Fax: 609-228-5909  Email: sales@MedChemExpress.com
**Ramipril (HOE-498)**  
**Cat. No.: HY-80279**

**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

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**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:**

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**Sinapinic acid (Sinapic acid)**  
**Cat. No.: HY-W009732**

**Bioactivity:** Sinapinic acid (Sinapic acid) is a phenolic compound isolated from Hydraophyllum formicarum Jack. Rhizome, acts as an inhibitor of HDAC, with an IC$_{50}$ of 2.27 mM$^1$, and also inhibits ACE-I activity$^2$. Sinapinic acid possess pot...

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

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**Temocapril hydrochloride**  
**Cat. No.: HY-80384**

**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

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**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

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**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

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**Zofenopril**  
**Cat. No.: HY-108321**

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

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

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**Zofenopril calcium (SQ26991)**  
**Cat. No.: HY-80655**

**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

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