# MCE MedChemExpress

### **Product** Data Sheet

## Angiotensin II human-<sup>13</sup>C<sub>6</sub>, <sup>15</sup>N TFA

Cat. No.: HY-13948BS

Molecular Formula:  $C_{46}^{13}C_6H_{72}F_3N_{12}^{15}NO_{14}$ 

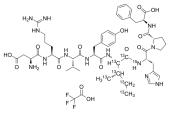
Molecular Weight: 1167.15

Target: Isotope-Labeled Compounds

Pathway: Others

**Storage:** 4°C, sealed storage, away from moisture

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



#### **SOLVENT & SOLUBILITY**

In Vitro

H<sub>2</sub>O: 25 mg/mL (21.42 mM; Need ultrasonic)

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg      | 10 mg     |
|------------------------------|-------------------------------|-----------|-----------|-----------|
|                              | 1 mM                          | 0.8568 mL | 4.2839 mL | 8.5679 mL |
|                              | 5 mM                          | 0.1714 mL | 0.8568 mL | 1.7136 mL |
|                              | 10 mM                         | 0.0857 mL | 0.4284 mL | 0.8568 mL |

Please refer to the solubility information to select the appropriate solvent.

#### **BIOLOGICAL ACTIVITY**

Description

Angiotensin II human  $^{13}$ C<sub>6</sub>,  $^{15}$ N TFA (Ang II- $^{13}$ C<sub>6</sub>,  $^{15}$ N TFA) is  $^{13}$ C- and  $^{15}$ N-labeled Angiotensin II human (TFA) (HY-13948B). Angiotensin II human (Angiotensin II) TFA is a vasoconstrictor and a major bioactive peptide of the renin/angiotensin system. Angiotensin II human TFA plays a central role in regulating human blood pressure, which is mainly mediated by interactions between Angiotensin II and the G-protein-coupled receptors (GPCRs) Angiotensin II type 1 receptor (AT1R) and Angiotensin II type 2 receptor (AT2R). Angiotensin II human TFA stimulates sympathetic nervous stimulation, increases aldosterone biosynthesis and renal actions  $^{[1][2][3]}$ .

In Vitro

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

 $[1].\ de\ Gasparo\ M,\ et\ al.\ International\ union\ of\ pharmacology.\ XXIII.\ The\ angiotensin\ II\ receptors.\ Pharmacol\ Rev.\ 2000\ Sep;52(3):415-72.$ 

| [2]. Crowley SD, et al. Angiotensin II causes hypertension and cardiac hypertrophy through its receptors in the kidney. Proc Natl Acad Sci U S A. 2006 Nov 21;103(47):17985-90. |
|---|
| [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-220.                                   |
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