
Product Data Sheet

Product Name: LHW090-A7

Cat. No.: GC14141

Chemical Properties

Cas. No.

Chemical Name (αS)-3'-chloro-α-[[[(1S)-2-ethoxy-1-methyl-2-oxoethyl]amino]-[1,1'-biphenyl]-4-propanoic acid, monosodium salt

SMILES ClC1=CC=CC(C2=CC=C(C[C@H](N[C@H](C(OCC)=O)C)C([O-])=O)C=C2)=C1.[Na+]Formula C₂₀H₂₁ClNO₄ • Na M.Wt 397.8

Solubility ≤1mg/ml in DMSO;5mg/ml in dimethyl formamide Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

LHW090-A7 is a potential inhibitor of neutral endopeptidase (NEP). It has been shown that the NEP inhibitors induced the increase of plasma levels of endogenous atrial natriuretic peptides (NPs), which makes the inhibition of NEP to be a potential novel therapeutic approach.

NPs block the activity of the renin-angiotensin-aldosterone system, have antihypertrophic and antiproliferative effects, and reduce sympathetic drive. Additionally, NEP inhibitors are expected to trigger natriuretic and diuretic effects. NEP, a zinc-dependent, membrane-bound endopeptidase, hydrolyses peptides on the amino side of hydrophobic residues. It is essential for the processing and catabolism of vasoactive peptides as well as peptides involved in natriuresis and diuresis. NEP is indirectly and directly involved in the regulation of signaling pathways. NEP is implicated in proteolytic degradation or activation of bioactive peptides, growth factors, and

Caution: Product has not been fully validated for medical applications. For research use only.

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cytokines in an indirect fashion. In addition to this, NEP is involved in regulating signaling pathways in a direct manner [1].

In vitro: Up to now, in vitro study of LHW090-A7 is still in the development stage.

In vivo: Up to now, in vivo study of LHW090-A7 is still in the development stage.

Reference:

[1]. Mangiafico, S., Costello-Boerrigter, L., Andersen, I., Cataliotti, A., & Burnett, J. Neutral endopeptidase inhibition and the natriuretic peptide system: an evolving strategy in cardiovascular therapeutics. *European Heart Journal*. 2012;34(12): 886-893.

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