

PRODUCT INFORMATION



LCZ696

Item No. 23425

CAS Registry No.: 936623-90-4
Formal Name: N-(1-oxopentyl)-N-[[2'-(2H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-L-valine compd. with α -ethyl (α R, γ S)- γ -[(3-carboxy-1-oxopropyl)amino]- α -methyl[1,1'-biphenyl]-4-pentanoate, sodium salt, hydrate (2:2:6:5)

MF: $C_{24}H_{29}N_5O_3 \cdot C_{24}H_{29}NO_5 \cdot 5/2H_2O \cdot 3Na$
FW: 961.0

Purity: $\geq 98\%$ (1:1 ratio of Valsartan and AHU377)

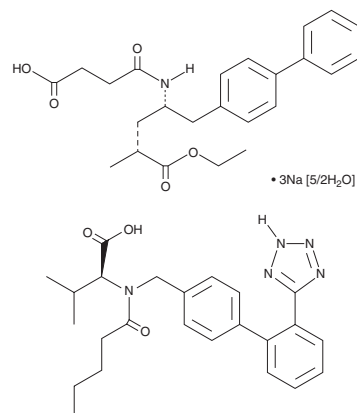
UV/Vis.: λ_{max} : 251 nm

Supplied as: A crystalline solid

Storage: $-20^\circ C$

Stability: ≥ 4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



Laboratory Procedures

LCZ696 is supplied as a crystalline solid. A stock solution may be made by dissolving the LCZ696 in the solvent of choice, which should be purged with an inert gas. LCZ696 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of LCZ696 in ethanol and DMF is approximately 30 mg/ml and approximately 20 mg/ml in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of LCZ696 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of LCZ696 in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

LCZ696 is a dual angiotensin II receptor antagonist and neprilysin inhibitor that is a combination of the nonpeptide angiotensin II receptor antagonist valsartan (Item No. 14178) and AHU377 (Item No. 21473), a prodrug of LBQ657 (Item No. 19829), which is an inhibitor of the zinc metallopeptidase neprilysin.¹⁻³ LCZ696 (2-60 mg/kg) induces a dose-dependent decrease in mean arterial pressure in rats expressing human renin and angiotensinogen, a double-transgenic model for angiotensin II-dependent hypertension.³ Formulations containing LCZ696 have been used in the treatment of chronic heart failure.

References

1. Burnier, M. Angiotensin II type 1 receptor blockers. *Circulation* **103**(6), 904-912 (2001).
2. Schiering, N., D'Arcy, A., Villard, F., et al. Structure of neprilysin in complex with the active metabolite of sacubitril. *Sci. Rep.* **6**, 27909 (2016).
3. Gu, J., Noe, A., Chandra, P., et al. Pharmacokinetics and pharmacodynamics of LCZ696, a novel dual-acting angiotensin receptor-neprilysin inhibitor (ARNi). *J. Clin. Pharmacol.* **50**(4), 401-414 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/19/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM