PRODUCT INFORMATION



BIBS39

Item No. 22932

CAS Registry No.:	133085-33-3	<u>^</u>	
Formal Name:	4'-[[2-butyl-6-[[(cyclohexylamino)	\sim	
	carbonyl]amino]-1H-benzimidazol-		/
	1-yl]methyl]-[1,1'-biphenyl]-2-	H N	
	carboxylic acid		
MF:	C ₃₂ H ₃₆ N ₄ O ₃		ОН
FW:	524.7		FO
Purity:	≥98%	H V	
UV/Vis.:	λ _{max} : 225, 295 nm		
Supplied as:	A crystalline solid	\	
Storage:	-20°C		
Stability:	≥4 years		
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Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BIBS39 is supplied as a crystalline solid. A stock solution may be made by dissolving the BIBS39 in the solvent of choice, which should be purged with an inert gas. BIBS39 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of BIBS39 in these solvents is approximately 30 mg/ml.

BIBS39 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BIBS39 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BIBS39 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BIBS39 is a nonpeptide antagonist of the angiotensin II type 1 (AT₁) receptor ($K_i = 29$ nM in rat lung membranes).¹ It is selective for AT_1 over AT_2 receptors (K_i = 480 nM in isolated rat adrenal medulla), as well as α_1^- , α_2^- , β_1^- , and β_2^- adrenergic, adenosine A_1^- and A_2^- , muscarinic M_1^- , M_2^- , and M_3^- , and atrial natriuretic peptide receptors (K,s = >100 μ M for all). BIBS39 (0.3-10 mg/kg) decreases diastolic blood pressure in pithed normotensive rats without affecting heart rate and in renal hypertensive rats with an increase in heart rate when administered at doses ranging from 1 to 30 mg/kg.^{1,2}

References

- 1. Zhang, J., Entzeroth, M., Wienen, W., et al. Characterization of BIBS 39 and BIBS 222: Two new nonpeptide angiotensin II receptor antagonists. Eur. J. Pharmacol. 218(1), 35-41 (1992).
- 2. Zhang, J., Van Meel, J.C., and Van Zwieten, P.A. Antihypertensive activity of the novel, nonpeptide angiotensin II receptor antagonists BIBS 39 and BIBS 222 in conscious renal hypertensive rats. Pharmacology 46(5), 241-247 (1993).

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.

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