PRODUCT INFORMATION



AUTEN-99

Item No. 30047

CAS Registry No.:	1049780-58-6		
Formal Name:	2-[1,1'-biphenyl]-4-yl-5,6-dihydro-		
	imidazo[2,1-b]thiazole, monohydrobromide		
Synonym:	Autophagy Enhancer-99	$\sim N$	
MF:	$C_{17}H_{14}N_2S \bullet HBr$		$ \rightarrow $
FW:	359.3	N S	
Purity:	≥98%		
UV/Vis.:	λ _{max} : 279 nm		• HBr
Supplied as:	A solid		
Storage:	-20°C		
Stability:	≥4 years		
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.			

Laboratory Procedures

AUTEN-99 is supplied as a solid. A stock solution may be made by dissolving the AUTEN-99 in the solvent of choice, which should be purged with an inert gas. AUTEN-99 is soluble in the organic solvent DMSO.

Description

AUTEN-99 is an inhibitor of the phosphatase myotubularin-related protein 14 (MTMR14/Jumpy).¹ It inhibits MTMR14/Jumpy activity in a cell-free assay when used at concentrations of 10 and 100 μ M. AUTEN-99 (1 and 10 μ M) enhances autophagic flux and increases the levels of LC3B-11 in HeLa cells. It increases survival of mouse primary neurons exposed to hydrogen peroxide as a model of oxidative stress when used at concentrations ranging from 0.5 to 5 μ M. AUTEN-99 increases the number of autophagic structures in mouse pancreas, kidney, and liver following oral or intraperitoneal administration. It also induces autophagy in the Drosophila larval fat body and increases the percentage of flies climbing a glass column in a climbing assay in a transgenic model of Parkinson's disease.

Reference

1. Kovács, T., Billes, V., Komlós, M., et al. The small molecule AUTEN-99 (autophagy enhancer-99) prevents the progression of neurodegenerative symptoms. Sci. Rep. 7, 42014 (2017).

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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