PRODUCT INFORMATION



UK 356618

Item No. 32859

CAS Registry No.: Formal Name:	230961-08-7 (2R)-N ¹ -[(1S)-2,2-dimethyl-1-[[[(1R)-1- phenylethyl]amino]carbonyl]propyl]-N ⁴ - hydroxy-2-[3-(2-methyl[1,1'-biphenyl]- 4-yl)propyl]-butanediamide	
MF:	C ₃₄ H ₄₃ N ₃ O ₄	
FW:	557.7	
Purity:	≥98%	\mathbf{N} \mathbf{N} \mathbf{N} \mathbf{N} \mathbf{N} \mathbf{N}
Supplied as:	A solid	H O H H
Storage:	-20°C	
Stability:	≥4 years	

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

Laboratory Procedures

UK 356618 is supplied as a solid. A stock solution may be made by dissolving the UK 356618 in the solvent of choice, which should be purged with an inert gas. UK 356618 is soluble in the organic solvent DMSO at a concentration of approximately 50 mg/ml.

Description

UK 356618 is an inhibitor of matrix metalloproteinase-3 (MMP-3; $IC_{50} = 5.9$ nM).¹ It is selective for MMP-3 over MMP-1, -2, -9, -13, and -14 ($IC_{50}s = 51$, 1.79, 0.84, 0.073, and 1.9 μ M, respectively). UK 356618 (73 nM) inhibits IL-6-induced migration of NCI H446 small cell lung cancer (SCLC) cells in vitro.² It reduces hyperglycemia-exacerbated increases in brain edema and hemorrhagic transformation in the cortex and striatum in a rat model of ischemia-reperfusion injury induced by middle cerebral artery occlusion (MCAO) when administered intravenously at a dose of 15 mg/kg.³

References

- 1. Fray, M.J. and Dickinson, R.P. Discovery of potent and selective succinyl hydroxamate inhibitors of matrix metalloprotease-3 (stromelysin-1). Bioorg. Med. Chem. Lett. 11(4), 571-574 (2001).
- 2. Jiang, Y.N., Yan, H.Q., Huang, X.B., et al. Interleukin 6 trigged ataxia-telangiectasia mutated activation facilitates lung cancer metastasis via MMP-3/MMP-13 up-regulation. Oncotarget 6(38), 40719-40733 (2015).
- 3. Hafez, S., Abdelsaid, M., El-Shafey, S., et al. Matrix metalloprotease 3 exacerbates hemorrhagic transformation and worsens functional outcomes in hyperglycemic stroke. Stroke 47(3), 843-851 (2016).

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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