

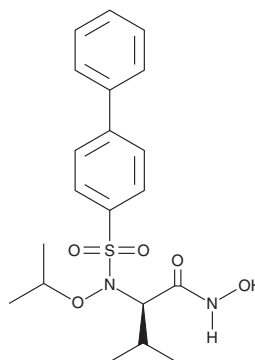
PRODUCT INFORMATION



ARP 101

Item No. 36212

CAS Registry No.: 849773-63-3
Formal Name: (2R)-2-[[[1,1'-biphenyl]-4-ylsulfonyl](1-methylethoxy)amino]-N-hydroxy-3-methyl-butanamide
MF: C₂₀H₂₆N₂O₅S
FW: 406.5
Purity: ≥98%
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

ARP 101 is supplied as a solid. A stock solution may be made by dissolving the ARP 101 in the solvent of choice, which should be purged with an inert gas. ARP 101 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

ARP 101 is an inhibitor of matrix metalloproteinase-2 (MMP-2; IC₅₀ = 0.09 nM).¹ It is selective for MMP-2 over MMP-1, -3, -7, -8, -9, and -14 (IC₅₀s = 147, 50, >1,000, 1.6, 6.7, and 9.8 nM, respectively). ARP 101 inhibits the migration and invasion of human umbilical vein endothelial cells (HUVECs) and induces autophagy in MCF-7 breast cancer, SH-SY5Y neuroblastoma, and HCT116 colorectal cancer cells.^{1,2} It increases small intestine necrosis induced by indomethacin (Item No. 70270) in rats.³

References

1. Rossello, A., Nuti, E., Carelli, P., *et al.* N-i-Propoxy-N-biphenylsulfonylaminobutylhydroxamic acids as potent and selective inhibitors of MMP-2 and MT1-MMP. *Bioorg. Med. Chem. Lett.* **15**(5), 1321-1326 (2005).
2. Jo, Y.K., Park, S.J., Shin, J.H., *et al.* ARP101, a selective MMP-2 inhibitor, induces autophagy-associated cell death in cancer cells. *Biochem. Biophys. Res. Commun.* **404**(4), 1039-1043 (2010).
3. Gyenge, M., Amagase, K., Kunimi, S., *et al.* Roles of pro-angiogenic and anti-angiogenic factors as well as matrix metalloproteinases in healing of NSAID-induced small intestinal ulcers in rats. *Life Sci.* **93**(12-14), 441-447 (2013).

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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