

Screening Libraries

Proteins

Product Data Sheet

AP 811

Cat. No.: HY-P1419 CAS No.: 124833-45-0 Molecular Formula: $C_{46}H_{66}N_{12}O_{8}$ Molecular Weight: 915.09 Target: Others Pathway: Others

Storage: Sealed storage, away from moisture

> Powder -80°C 2 years

> > -20°C 1 year

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

BIOLOGICAL ACTIVITY

Description	AP 811 is a selective atrial natriuretic peptide clearance receptor (ANP-CR, NPR3) antagonist with a K _i of 0.48 nM. AP 811 displays >20000-fold selectivity for NPR3 over NPR1. AP 811 abolishes ANP-induced pump stimulation ^{[1][2]} .
IC ₅₀ & Target	Ki: 0.48 nM (NPR3) ^[1]
In Vitro	In proliferating cardiomyocytes, AP 811 (10-500 nM) could completely abolish the enhanced cardiomyocyte proliferation seen with low concentration ANP (10 nM) ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Jason R Becker, et al. Differential activation of natriuretic peptide receptors modulates cardiomyocyte proliferation during development. Development. 2014 Jan;141(2):335-45.

[2]. Veale CA, et al. The discovery of non-basic atrial natriuretic peptide clearance receptor antagonists. Part 1. Bioorg Med Chem Lett. 2000;10(17):1949-1952.

[3]. William M, et al. Natriuretic peptides stimulate the cardiac sodium pump via NPR-C-coupled NOS activation. Am J Physiol Cell Physiol. 2008;294(4):C1067-C1073.

Caution: Product has not been fully validated for medical applications. For research use only.

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