
AR7

产品编号: D50786

CAS: 80306-38-3

分子式: C₁₅H₁₂ClNO

纯度: ≥98%

InChi: InChi=1S/C₁₅H₁₂ClNO/c1-10-2-4-11(5-3-10)14-9-18-15-8-12(16)6-7-13(15)17-14/h2-8H,9H2,1H3

InChi Key: MVOZLTFXYGHZPM-UHFFFAOYSA-N

Smiles: CC1C=CC(=CC=1)C1COC2C=C(Cl)C=CC=2N=1

外观: 固体粉末

作用通路: RAR/RXR

溶解性: DMSO up to 100 mM

保存条件: Store in dry, dark place for one year.

产品介绍: AR7 was developed as a highly potent and selective enhancer of the chaperone-mediated autophagy (CMA) through antagonizing RAR α . It is a synthetic derivative of all-trans-retinoic acid developed through the structure-based chemical design. CMA contributes to cellular quality control and the cellular response to stress through the selective degradation of cytosolic proteins in lysosomes. A decrease in CMA activity occurs in aging and in age-related disorders (such as neurodegenerative diseases and diabetes). AR7 is the first small molecule developed to selectively stimulate CMA without affecting macroautophagy. Importantly, AR7 was shown to protect cells from oxidative stress and proteotoxicity, presenting a potential therapeutic strategy against cellular dysfunction and disease resulted from reduced CMA.