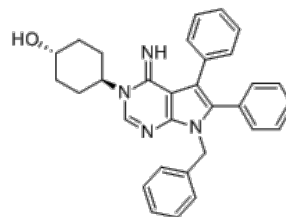


Product Name	: Metarrestin
Synonyms	: ML246; ML 246
Cat No.	: M11880
CAS Number	: 1443414-10-5
Molecular Formula	: C ₃₁ H ₃₀ N ₄ O
Formula Weight	: 474.61
Chemical Name	: Trans-4-(7-benzyl-4-imino-5,6-diphenyl-4,7-dihydro-3H-pyrrolo[2,3-d]pyrimidin-3-yl) cyclohexanol



Description : Metarrestin (ML246) is a specific inhibitor of perinuclear compartment (PNC), disrupts PNCs in PC3M-GFP-PTB cells with IC₅₀ of 0.39 uM, specifically binds eEF1A2; reduces PNC prevalence in different human cancer cell lines at 1 uM (IC₁₀₀ for PC3M cells) for 24 hours; disrupts the nucleolar structure and inhibits RNA polymerase (Pol) I transcription, by interacting with the translation elongation factor eEF1A2; inhibits cancer cell invasion in vitro, suppresses metastatic development in three mouse models of human cancer, and extends survival of mice in a metastatic pancreatic cancer xenograft model with no organ toxicity or discernable adverse effects.

Pathway : Nuclear Receptor/Transcription Factor

Target : eIF

Receptor : eIF

Solubility : —

SMILES : O[C@H]1CC[C@H](N(C=NC2=C3C(C4=CC=CC=C4)=C(C5=CC=CC=C5)N2CC6=CC=CC=C6)C3=N)CC1

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Frankowski KJ, et al. Sci Transl Med. 2018 May 16; 10(441). pii: eaap8307. 2. Frankowski K, et al. Discovery and Development of Small Molecules That Reduce PNC Prevalence. Probe Reports from the NIH Molecular Libraries Program [Internet]. 3. Rocchi A, et al. PLoS Genet. 2017 Aug 14; 13(8):e1006962. 4. Kuramoto K, et al. Autophagy. 2016 Sep; 12(9):1460-71.