

Product Name : ReACp53

Synonyms :

Cat No. : M30126

CAS Number :

Molecular Formula : C108H206N52O24

Formula Weight : 2617.1

Chemical Name :

Description : ReACp53 is a cell-penetrating peptide, designed to inhibit p53 amyloid formation, rescues p53 function in cancer cell lines and in organoids derived from high-grade serous ovarian carcinomas (HGSOC). (In Vitro): ReACp53 penetrates into HGSOC primary cancer cells and converts mutant p53 from a punctate state into soluble WT-like p53. ReACp53 also induces cancer cell death, cell cycle arrest and results in p53 degradation. ReACp53 specifically affects cell viability and proliferation of cancer cells bearing mutant p53 but not wild type when grown as organoids. (In Vivo): Only mutant p53-bearing tumors in the ReACp53-treated mice cohorts are 80-90% smaller in weight than the control cohort, confirming the ability of ReACp53 to limit tumor proliferation and shrink tumors. A significant reduction of Ki67 positive cells is evident in ReACp53-treated OVCAR3 xenografts, indicative of a reduced proliferative index. Similar results are observed in the minimal residual disease model. In the paradigm, administration of ReACp53 results in a significant increase in p21 and MDM2 transcription in OVCAR3 but not MCF7 xenografts. A significantly increased population is also found in G0/G1 phase, supporting proliferative arrest upon ReACp53 administration in vivo.

Pathway : Others

Target : Other Targets

Receptor : p53 amyloid formation

Solubility : H2O : ≥ 50 mg/mL (19.10 mM)

SMILES : —

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

Soragni A et al. A Designed Inhibitor of p53 Aggregation Rescues p53 Tumor Suppression in Ovarian Carcinomas. *Cancer Cell*. 2016 Jan 11;29(1):90-103.