

Product Data Sheet

SHP2/CDK4-IN-1

Cat. No.: HY-150609 CAS No.: 2924036-87-1 Molecular Formula: $C_{33}H_{35}ClF_2N_{10}OS$

Molecular Weight: 693.21

Target: Phosphatase; CDK; SHP2

Pathway: Metabolic Enzyme/Protease; Cell Cycle/DNA Damage; Protein Tyrosine Kinase/RTK

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	SHP2/CDK4-IN-1 (compound 10) is an orally active and potent SHP2 and CDK4 dual inhibitor, with IC $_{50}$ values of 4.3 and 18.2 nM, respectively. SHP2/CDK4-IN-1 effectively induces G0/G1 arrest to prevent the proliferation of TNBC cell lines. SHP2/CDK4-IN-1 shows significant antitumor efficacy in the EMT6 syngeneic mouse model. SHP2/CDK4-IN-1 can be used for triple-negative breast cancer (TNBC) research ^[1] .
IC ₅₀ & Target	CDK4 $18.2 \pm 1.3 \text{ nM (IC}_{50})$

REFERENCES

[1]. Chen X, et al. Discovery of a Novel Src Homology-2 Domain Containing Protein Tyrosine Phosphatase-2 (SHP2) and Cyclin-Dependent Kinase 4 (CDK4) Dual Inhibitor for the Treatment of Triple-Negative Breast Cancer. J Med Chem. 2022 May 12;65(9):6729-6747.

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

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