产品名称：**XMD16-5**
产品别名：**XMD16-5**

生物活性：

Description	XMD16-5 is a potent **TNK2** inhibitor with **IC_{50}** values of 16 and 77 nM for the D163E and R806Q mutations, respectively.
IC_{50} & Target	IC50: 16 nM (TNK2, D163E mutation), 77 nM (TNK2, R806Q mutation)[1]
In Vitro	XMD16-5 potently inhibits the growth of the TNK2 mutant expressing cell lines while having little or no effect on the control cells out to the highest tested concentrations (1,000 nM). XMD16-5 has IC50s of 16 nM and 77 nM for the D163E and R806Q mutations. The effects of XMD16-5 on TNK2 cell lines are largely due to on-target effects on TNK2. Auto-phosphorylation of overexpressed TNK2 mutants could be blocked with TNK2 inhibitor XMD16-5[1].
Solvent&Solubility	***In Vitro:*** **DMSO : ≥ 29 mg/mL (69.63 mM)** * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.4011 mL	12.0054 mL	24.0108 mL
	5 mM	0.4802 mL	2.4011 mL	4.8022 mL
	10 mM	0.2401 mL	1.2005 mL	2.4011 mL

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C 储存时，请在 1 个月内使用。

References	[1]. Maxson JE, et al. Identification and Characterization of Tyrosine Kinase Nonreceptor 2 Mutations in Leukemia through Integration of Kinase Inhibitor Screening and Genomic Analysis.

实验参考：

Cell Assay	Cells are treated with the following inhibitors for 72 hours: dasatinib, AIM-100, XMD8-87 and XMD16-5. Cell viability is measured using a methanethiosulfonate (MTS)-based assay and absorbance (490 nm) is read at 1 and 3 hours after adding reagent[1].
Kinase Assay	Kinase targets are tested with biochemical enzymatic kinase assays using the SelectScreen Kinase Profiling Service to determine IC50 values. The compounds (XMD16-5) are assayed at 10 concentrations (3-fold serial dilutions starting from 1 μM) at an ATP concentration equal to the ATP Km[1].
References	[1]. Maxson JE, et al. Identification and Characterization of Tyrosine Kinase Nonreceptor 2 Mutations in Leukemia through Integration of Kinase Inhibitor Screening and Genomic Analysis.