## Data Sheet (Cat.No.T13096)



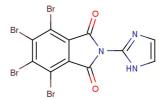
tBID

## **Chemical Properties**

CAS No.: 1639895-85-4 Formula: C11H3Br4N3O2

Molecular Weight: 528.78
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).



## **Biological Description**

Description	tBID is a selective homeodomain-interacting protein kinase 2 (HIPK2) inhibitor (IC50 of 0.33 μM)
Targets(IC <sub>50</sub> )	HIPK2: 0.33 μM
In vitro	Homeodomain-interacting protein kinase 2 (HIPK2) is a Ser/Thr kinase controlling cell proliferation and survival. TBID, displays toward HIPK2 unprecedented efficacy with IC50 of 0.33 µM and selectivity (Gini coefficient 0.592 out of a panel of 76 kinases). The other two members of the HIPK family, HIPK1 and HIPK3, are also inhibited by TBID, although not as efficient as HIPK2. The mode of action of TBID is competitive with respect to ATP, consistent with modelling. TBID interacts with the hinge region through hydrophobic interactions between Val 213, Val 261, Phe 277, Leu 280, Met 331, Ile 345, and the tetrabromine moiety, while the symmetric nitrogen atom at position 3 interacts with the catalytic Lys 228, thus playing a crucial role in the binding architecture.

# **Solubility Information**

Solubility	DMSO: 26 mg/mL (49.17 mM)
	(< 1 mg/ml refers to the product slightly soluble or insoluble)

#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	1.891 mL	9.456 mL	18.911 mL
5 mM	0.378 mL	1.891 mL	3.782 mL
10 mM	0.189 mL	0.946 mL	1.891 mL
50 mM	0.038 mL	0.189 mL	0.378 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

#### Reference

1. Cozza G, et al. Synthesis and properties of a selective inhibitor of homeodomain-interacting protein kinase 2 (HIPK2). PLoS One. 2014 Feb 24;9(2):e89176.

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