

# **Data Sheet**

Product Name:	MARK-IN-1
Cat. No.:	CS-0022188
CAS No.:	1109283-93-3
Molecular Formula:	C <sub>22</sub> H <sub>23</sub> F <sub>2</sub> N <sub>7</sub> OS
Molecular Weight:	471.53
Target:	AMPK
Pathway:	Epigenetics; PI3K/Akt/mTOR
Solubility:	10 mM in DMSO

## **BIOLOGICAL ACTIVITY:**

MARK-IN-1 is a potent microtubule affinity regulating kinase (**MARK**) inhibitor with an **IC**<sub>50</sub> of <0.25 nM. IC50 & Target:IC50: <0.25 nM (MARK)<sup>[1]</sup> *In Vitro:* MARK-IN-1 (Compound 25) is a potent MARK inhibitor. Inhibition of MARK represents a potentially attractive means of arresting neurofibrillary tangle pathology in Alzheimer's disease<sup>[1]</sup>.

#### **References:**

[1]. Sloman DL, et al. Optimization of microtubule affinity regulating kinase (MARK) inhibitors with improved physical properties. Bioorg Med Chem Lett. 2016 Sep 1;26(17):4362-6.

#### **CAIndexNames:**

2-Thiophenecarboxamide, N-[(1R,6R)-6-amino-2,2-difluorocyclohexyl]-5-methyl-4-[6-(1-methyl-1H-pyrazol-4-yl)pyrazolo[1,5-a]pyrimidin-3-yl]-

### SMILES:

O=C(C1=CC(C2=C3N=CC(C4=CN(C)N=C4)=CN3N=C2)=C(C)S1)N[C@H]5C(F)(F)CCC[C@H]5N

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

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