

WNK463, WNK kinase inhibitor

Catalog	Unit
TBI4109-5MG	5 mg
TBI4109-25MG	25 mg

Product Details

Formal Name: N-tert-Butyl-3-[1-[5-[5-(trifluoromethyl)-1,3,4-oxadiazol-2-yl]pyridine-2-yl]piperidin-4-yl]imidazole-4-carboxamide

Molecular Formula: C₂₁H₂₄F₃N₇O₂

Formula Weight: 463.50

CAS Number: 2012607-27-9

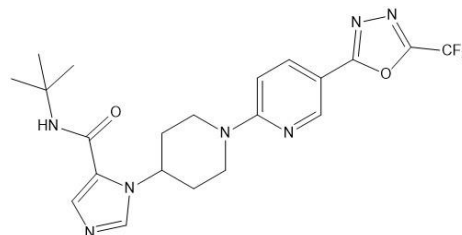
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 25 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

WNK kinase inhibitor

Functions

Potent and selective pan-With-No-Lysine (WNK) kinase inhibitor (IC₅₀'s: WNK1 = 5 nM, WNK2 = 1 nM, WNK3 = 6 nM, WNK4 = 9 nM), an important enzyme in blood pressure regulation and body fluid and electrolyte homeostasis. WNK kinases respond to hypertonicity by regulating SLC12 cation chloride transporters to rescue cell volume. WNK463 reduced migration of invasive types of breast cancer and attenuated tumor growth and metastatic burden in a mouse model. It induced a significant increase in NLRP3 inflammasome activation and pyroptosis specifically via WNK1 inhibition as well as increasing TNF production without inflammasome activation.

Application Procedures

First dissolved in DMSO (up to 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.