

Vacuolin-1, PIKfyve inhibitor

Catalog	Unit
TBI5151-5MG	5 mg
TBI5151-25MG	25 mg

Product Details

Formal Name: 3-Iodobenzaldehyde,2-[4-(diphenylamino)-6-(4-morpholinyl)-1,3,5-triazin-2-yl]hydrazone

Molecular Formula: C₂₆H₂₄N₇O

Formula Weight: 577.4

CAS Number: 351986-85-1

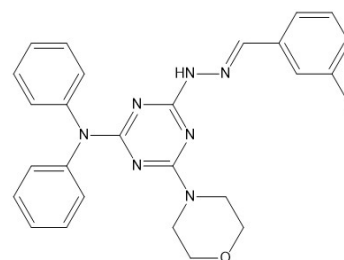
Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (35 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

PIKfyve inhibitor

Functions

Vacuolin-1 inhibits autophagy via inhibition of Ca²⁺-dependent fusion of lysosomes with the plasma membrane and the release of lysosomal content and has no effect on other membrane-bound organelles. It has been shown to block endosome maturation by activating RAB5 which compromises the biogenesis and function of lysosomes including autophagosomal-lysosomal fusion and endosomal-lysosomal degradation. It potently inhibits migration, invasion and colony formation of cancer cells (which is linked to endosomal trafficking) and targets capping protein Z β (CapZ β) in these processes. Inhibition of lysosomal maturation was shown to be due to potent inhibition of PIKfyve.

Application Procedures

First dissolved in DMSO (35 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.