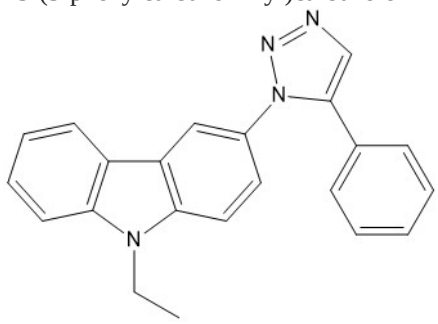
Tribioscience

MBQ-167, Rac/Cdc42 inhibitor

Catalog	Unit
TBI4434-5MG	5 mg
TBI4434-25MG	25 mg

Product Details

Formal Name: 1-(9-Ethyl-9H-carbazol-3-yl)-5-phenyl-1H-1,2,3-triazole; 9-Ethyl-3-(5-phenylcarbazol-1-yl)carbazole
Molecular Formula: $C_{22}H_{18}N_4$
Formula Weight: 338.41
CAS Number: 2097938-73-1
Purity: >98%
Formulation: powder
Solubility: Soluble in DMSO (up to 25 mg/ml).
Storage: -20°C
Stability: ≥ 1 year.



Applications

Rac/Cdc42 inhibitor

Functions

Dual inhibitor of the Rho GTPases Rac (IC50 = 103 nM) and Cdc42 (IC50 = 78 nM). It inhibits breast cancer cell migration, viability, and mammosphere formation. MBQ-167 induced polarity loss resulting in 95% cell rounding and detachment from the substratum in metastatic MDA-MB-231 cells and was active in GFP-HER2-BM, MDA-MB-468, and Hs578t breast cancer cells as well as Mia-PaCa-2 pancreatic cancer cells, SKOV3 ovarian cancer cells, AGS and NCI-N87 gastric cancer cells, and SH-SY5Y neuroblastoma cells. Non-cancerous mammary epithelial MCF10A and epithelial breast cancer MCF-7 cells were resistant to MBQ-167. MBQ-167 inhibited viability and induced apoptosis in gefitinib and lapatinib resistant SKBR3 breast cancer cells. MBQ-167 inhibited triple negative breast cancer tumor growth and lung metastasis in a mouse model. Active in vivo.

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 2 months.

For research use only.

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