

## **Data Sheet**

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 MBQ-167

 Cat. No.
 :
 PC-60905

 CAS No.
 :
 2097938-73-1

 Molecular Formula
 :
 C<sub>22</sub>H<sub>18</sub>N<sub>4</sub>

 Molecular Weight
 :
 338.414

 Target
 :
 Small GTPase

 Solubility
 :
 10 mM in DMSO



## **Biological Activity**

MBQ-167 (MBQ 167, MBQ167) is a potent, dual **Rac/Cdc42** inhibitor with IC50 of 103/78 nM, respectively, in metastatic breast cancer cells.

MBQ-167 significantly decreases Rac and Cdc42 downstream effector p21-activated kinase (PAK) signaling and the activity of STAT3, without affecting Rho, MAPK, or Akt activities.

MBQ-167 also inhibits breast cancer cell migration, viability, and mammosphere formation; decreases metastatic cancer cell viability with GI50 of 130 nM without affecting noncancer mammary epithelial cells, and causes G2-M cell-cycle arrest and subsequent apoptosis.

MBQ-167 inhibits mammary tumor growth and metastasis in immunocompromised mice.

## References

Humphries-Bickley T, et al. Mol Cancer Ther. 2017 May;16(5):805-818.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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