



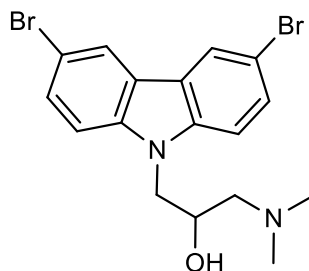
## Catalog # 10-1353

### Wiskostatin

CAS# 253449-04-6

1-(3,6-Dibromocarbazol-9-yl)-3-dimethylaminopropan-2-ol

Lot # X102309



A selective, reversible inhibitor of neural Wiskott-Aldrich syndrome protein (N-WASP) activity<sup>1</sup>. Binds to the regulatory domain of N-WASP and inhibits activation of Arp2/3 complex by forcing N-WASP into an inactive conformation<sup>2</sup>. Inhibits PIP<sub>2</sub>-induced actin polymerization (EC<sub>50</sub>=4 μM). Perturbs agrin-elicited acetylcholine receptor clustering<sup>3</sup>. Inhibits the formation of dendritic spines and synapses in hippocampal neurons<sup>4</sup>.

- 1) Peterson *et al.* (2002), *Small molecules, big impact: a history of chemical inhibitors and the cytoskeleton*; Chem. Biol., **9** 1275
- 2) Peterson *et al.* (2004), *Chemical inhibition of N-WASP by stabilization of a native autoinhibited conformation*; Nat. Struct. Mol. Biol., **11** 747
- 3) Cartaud *et al.* (2011), *Agrin triggers the clustering of raft-associated acetylcholine receptors through actin cytoskeleton reorganization*; Biol. Cell., **103** 287
- 4) Wegner *et al.* (2008), *N-wasp and the arp2/3 complex are critical regulators of actin in the development of dendritic spines and synapses*; J. Biol. Chem., **283** 15912

### PHYSICAL DATA

|                        |  |
|------------------------|--|
| Molecular Weight:      | 426.15   |
| Molecular Formula:     | C <sub>17</sub> H <sub>18</sub> Br <sub>2</sub> N <sub>2</sub> O   |
| Purity:                | 98% by TLC [9:1 CH <sub>2</sub> Cl <sub>2</sub> /CH <sub>3</sub> OH; R <sub>f</sub> = 0.16]<br>NMR: (Conforms)   |
| Solubility:            | DMSO (up to 30 mg/ml) or Ethanol (up to 10 mg/ml with warming)   |
| Physical Description:  | White solid  |
| Storage and Stability: | Store as supplied at room temperature for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months. |

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