A selective, reversible inhibitor of neural Wiskott-Aldrich syndrome protein (N-WASP) activity. Binds to the regulatory domain of N-WASP and inhibits activation of Arp2/3 complex by forcing N-WASP into an inactive conformation. Inhibits PIP2-induced actin polymerization (EC50=4 μM). Perturbs agrin-elicited acetylcholine receptor clustering. Inhibits the formation of dendritic spines and synapses in hippocampal neurons.

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 andx 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: C17H18Br2N2O
Purity: 98% by TLC [9:1 CH2Cl2/CH3OH; Rf = 0.16]
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.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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