

## Catalog # 10-1287 SMER28

CAS# 307538-42-7 6-Bromo-4-allylaminoquinazoline Lot # X103032



Induces autophagy via an mTOR-independent pathway. Enhances clearance of  $\beta$ -amyloid protein in cell lines and primary neuronal culture models.<sup>1-3</sup> May be a useful lead compound for the development of new therapeutics for neurodegenerative diseases.<sup>4</sup> Induces the release of articular cartilage vesicles from healthy articular chondrocytes in a dose- and time-dependent manner.<sup>5</sup> Promotes reprogramming of fibroblasts to neural stem-like cells.<sup>6</sup> Cell permeable.

- 1) Tian et al. (2011), A small-molecule enhancer of autophagy decreases levels of Abeta and APP-CTF via Atg5-dependent autophagy pathway; FASEB J., **25** 1934
- 2) Tian *et al.* (2014), *the convergence of endosomal and autophagosomal pathways; implications for APP-CTF degradation;* Autophagy, **10** 694
- 3) Shen et al. (2011), Novel cell- and tissue-based assays for detecting misfolded and aggregated protein accumulation within aggresomes and inclusion bodies; Cell Biochem. Biophys., **60** 173
- 4) Renna et al. (2010), chemical inducers of autophagy that enhance the clearance of mutant proteins in neurodegenerative diseases; J. Biol. Chem., **285** 11061
- 5) Rosenthal *et al.* (2015), Autophagy modulates articular cartilage vesicle formation in primary articular chondrocytes; J. Biol. Chem., **290** 13028
- 6) Zhang et al. (2016), Phamracological Reprogramming of Fibroblasts into Neural Stem Cells by Signaling-Directed Transcriptional Activation; Cell Stem Cell., **18** 653

## PHYSICAL DATA

Molecular Weight:	264.12
Molecular Formula:	C <sub>11</sub> H <sub>10</sub> BrN <sub>3</sub>
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	Soluble in DMSO (up to 25 mg/ml) or in Ethanol (up to 2 mg/ml)
Physical Description:	Beige solid
Storage and Stability:	Store as supplied, desiccated at room temperature for up to 1 year 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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