

Product Specification Sheet

Product Name: J147

Catalog Number: C5147-2 (powder)

C5147-2s (10mM in DMSO)

Package Size: 2 mg

Technical information:

Chemical Formula: C₁₈H₁₇F₃N₂O₂

CAS #: 1146963-51-0

Molecular Weight: 350.33

Purity: >98%

Formulation: Yellow solid

Solubility: Soluble in DMSO up to 50 mM

Chemical Name: (E)-N-(2,4-dimethylphenyl)-2,2,2-trifluoro-N'-(3-

methoxybenzylidene)acetohydrazide

Storage: Store solid powder at 4°C desiccated;

Store DMSO solution at -20°C.

Handling: • For C7220-2 (powder), add 571 μL of DMSO to make 10 mM solution.

• For C7220-2s, before open the vial, centrifuge the vial at 500rpm x 1 min in a 50 mL conical tube to ensure full recovery of sample.

Biological Activity:

J147 was discovered based upon efficacy in multiple cell culture models of age-associated pathologies rather than exclusively amyloid metabolism. It is an exceptionally potent, orally active and broadly neuroprotective compound has the ability to enhance memory in normal animals as well as to prevent memory deficits in Alzheimer's disease (AD) transgenic mice.

The neurotrophic and memory-enhancing activities of J147 are associated with an increase in brain derived neurotrophic factor (BDNF) levels and the expression of BDNF responsive proteins, the enhancement of LTP, the preservation of synaptic protein, the reduction of amyloid plaques, etc. These pleiotrophic effects of a single molecule suggest that J147 has

potential for the treatment of AD.

Reference: 1. Qi Chen, et al. A novel neurotrophic drug for cognitive enhancement

and Alzheimer's disease. PLoS One (2011), 6(12), e27865.

For Technical Support: technical@cellagentech.com

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