

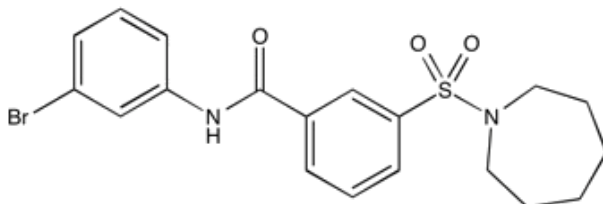
**Catalog # 10-1429**

**AK-7**

CAS# 420831-40-9

3-(1-Azepanylsulfonyl)-N-(3-bromophenyl)benzamide

Lot # X105311



A selective Sirt2 inhibitor ( $IC_{50}=15.5 \mu M$ ) which does not inhibit Sirt1 or Sirt3<sup>1</sup>. It down regulates cholesterol biosynthesis genes in primary striatal neurons<sup>1</sup>. Displays neuroprotective effects in Huntington's disease mouse models including improved motor function, extended survival and reduced brain atrophy all of which were associated with reduced aggregated mutant huntingtin<sup>2</sup>.

- 1) Tylor *et al.* (2011), *A brain-permeable small molecule that reduces neuronal cholesterol by inhibiting activity of sirtuin 2 deacetylase*; ACS Chem. Biol., **6** 540
- 2) Chopra *et al.* (2012), *The sirtuin 2 inhibitor AK-7 is neuroprotective in Huntington's disease mouse models*; Cell Rep., **2** 1492

**PHYSICAL DATA**

|                        |   |
|------------------------|---|
| Molecular Weight:      | 437.36  |
| Molecular Formula:     | C <sub>19</sub> H <sub>21</sub> BrN <sub>2</sub> O <sub>3</sub> S   |
| Purity:                | 98% by TLC  |
|                        | NMR: (Conforms)   |
| Solubility:            | DMSO (up to 50 mg/ml) or Ethanol (up to 8 mg/ml with warming)   |
| Physical Description:  | White solid   |
| Storage and Stability: | Store as supplied desiccated at room temperature for up to 3 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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