

## Catalog # 10-4945 Anle138b

CAS# 882697-00-9 5-(1,3-Benzodioxol-5-yl)-3-(3-bromophenyl)-1H-pyrazole Lot # FBS2050

Anle138b is an aggregation inhibitor that modulates the formation of pathological oligomers of both prion and  $\alpha$ -synuclein.<sup>1</sup> In mouse models of prion and diseases and Parkinson's disease, Anle138b strongly inhibited oligomer formation, neuronal degeneration, and disease progression even after disease onset.<sup>1,2</sup> Anle138b has delayed disease progression and prevented motor decline in multiple neurodegenerative models.<sup>3-6</sup> Treatment of melanoma cells with anle138b caused massive cell death via major dysregulation of autophagy revealing a protective effect of  $\alpha$ -synuclein on autophagy in these cells.<sup>7</sup> Orally bioavailable and able to cross the blood-brain barrier.

- 1) Wagner et al. (2013), Anle138b: a novel oligomer modulator for disease-modifying therapy of neurodegenerative diseases such as prion and Parkinson;s disease; Acta Neuropathol., **125** 795
- 2) Levin et al. (2014), The oligomer modulator anle138b inhibits disease progression in a Parkinson's mouse model even with treatment started after disease onset; Acta Neuropathol., **127** 779
- 3) Wagner et al. (2015), Reducing tau aggregates with anle138b delays disease progression in a mouse model of tauopathies; Acta Neuropathol., **130** 619
- 4) Martinez Hernandez et al. (2018), The diphenylpyrazole compound anle138b blocks  $A\beta$  channels and rescues disease phenotypes in a mouse model for amyloid pathology; EMBO Mol. Med., **10** 32
- 5) Heras-Garvin et al. (2019), Anle138b modulates α-synuclein oligomerization and prevents motor decline and neurodegeneration in a mouse model of multiple system atrophy; Mov. Disord., **34** 255
- 6) Brendel et al. (2019), Late-stage Anle138b treatment ameliorates tau pathology and metabolic decline in a mouse model of human Alzheimers disease tau; Alzheimer's Res.Ther., **11** 67
- 7) Turriani et al. (2017), Treatment with diphenyl-pyrazole compound anle138b reveals that  $\alpha$ -synuclein protects melanoma cells from autophagic cell death; Proc. Natl. Acad. Sci. USA, **114** E4971

## PHYSICAL DATA

Molecular Weight: 343.18

Molecular Formula: C<sub>16</sub>H<sub>11</sub>BrN<sub>2</sub>O<sub>2</sub>

Purity: 99% by HPLC

NMR: (Conforms)

Solubility: DMSO (15 mg/mL with warming)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase.

Solutions in DMSO may be stored at -20°C for up to 3 months.