

Catalog # 10-4029 RGFP966

CAS# 1357389-11-7

(2E)-N-(2-Amino-4-fluorophenyl)-3-[(2E)-1-(3-phenyl-2-propen-1-yl)-1H-pyrazol-4-yl]-2-propenamide Lot # FBS1098

RGFP966 is a selective inhibitor of HDAC3 ($IC_{50} = 80 \text{ nM}$, no other HDACs inhibited @ $15\mu\text{M}$). It facilitates the extinction of cocaine-seeking behavior in mice and transforms subthreshold learning events into robust long-term memory, suggesting a potential therapeutic target for memory enhancement and neurodegenerative diseases. 1-5

- Malvaez et al. (2013), HDAC3-selective inhibitor enhances extinction of cocaine-seeking behavior in a persistent manner; Proc.Natl.Acad.Sci.USA 110 2647
- 2) Bieszczad et al. (2015), Histone Deacetylase Inhibition via RGFP966 Releases the Brakes on Sensory Cortical Plasticity and the Specificity of Memory Formation; J.Neurosci. **35** 13124
- 3) Zhu et al. (2017), HDAC3 negatively regulates spatial memory in a mouse model of Alzheimers disease; Aging Cell 16 1073
- 4) Haiqun et al. (2016), The Effects of Pharmacological Inhibition of Histone Deacetylase 3 (HDAC3) in Huntington's Disease Mice; PLoS One 0152498
- 5) Janczura et al. (2018), Inhibition of HDAC3 reverses Alzheimer's disease-related pathologies in vitro and in the 3xTg-AD mouse model: Proc.Natl.Acad.Sci.USA 115 E11148

PHYSICAL DATA

Molecular Weight: 362.40
Molecular Formula: C₂₁H₁₉FN₄O
Purity: >98%

Solubility:

NMR: (Conforms)

Soluble in DMSO (20 mg/ml)

Physical Description: Off-white solid

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

at -20°C for up to 1 month.

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