

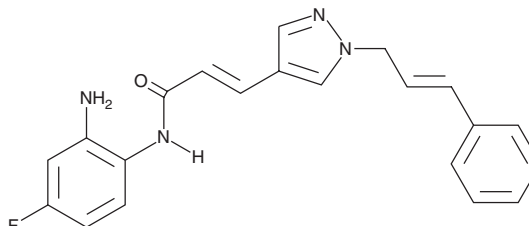
# PRODUCT INFORMATION



## RGFP966

Item No. 16917

**CAS Registry No.:** 1357389-11-7  
**Formal Name:** (2E)-N-(2-amino-4-fluorophenyl)-3-[1-(3-phenyl-2-propen-1-yl)-1H-pyrazol-4-yl]-2-propenamid  
**MF:** C<sub>21</sub>H<sub>19</sub>FN<sub>4</sub>O  
**FW:** 362.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 245, 285 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

RGFP966 is supplied as a crystalline solid. A stock solution may be made by dissolving the RGFP966 in the solvent of choice, which should be purged with an inert gas. RGFP966 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of RGFP966 in these solvents is approximately 30 mg/ml.

RGFP966 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

HDAC3 is highly expressed in brain, and its activity has been associated with negative regulation of learning and memory processes. RGFP966 is a selective inhibitor of HDAC3 (IC<sub>50</sub> = 0.08 μM) that does not affect other HDACs at concentrations up to 15 μM.<sup>1</sup> At 10 mg/kg, RGFP966 can facilitate the extinction of cocaine-seeking behavior and enhance long-term object memory acquisition/consolidation in mice.<sup>1</sup> At 10 μM, RGFP966 can also induce apoptosis of cutaneous T cell lymphoma cells by disrupting their DNA replication activity.<sup>2</sup>

### References

1. Malvaez, M., McQuown, S.C., Rogge, G.A., *et al.* HDAC3-selective inhibitor enhances extinction of cocaine-seeking behavior in a persistent manner. *Proc. Natl. Acad. Sci. USA* **110**(7), 2647-2652 (2013).
2. Wells, C.E., Bhaskara, S., Stengel, K.R., *et al.* Inhibition of histone deacetylase 3 causes replication stress in cutaneous T cell lymphoma. *PLoS One* **8**(7), 1-13 (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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