

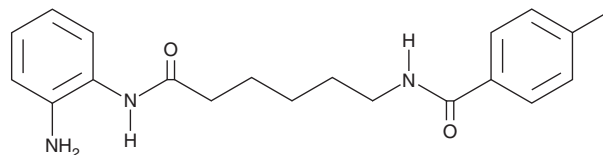
# PRODUCT INFORMATION



## RGFP109

Item No. 21568

**CAS Registry No.:** 1215493-56-3  
**Formal Name:** N-[6-[(2-aminophenyl)amino]-6-oxohexyl]-4-methyl-benzamide  
**Synonym:** RG-2833  
**MF:** C<sub>20</sub>H<sub>25</sub>N<sub>3</sub>O<sub>2</sub>  
**FW:** 339.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 290 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

RGFP109 is supplied as a crystalline solid. A stock solution may be made by dissolving the RGFP109 in the solvent of choice, which should be purged with an inert gas. RGFP109 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of RGFP109 in these solvents is approximately 1.67, 20, and 30 mg/ml, respectively.

RGFP109 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RGFP109 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. RGFP109 has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

RGFP109 is a brain-penetrant inhibitor of histone deacetylases (HDACs; IC<sub>50</sub>s = 60 and 50 nM; K<sub>i</sub>s = 32 and 5 nM for HDAC1 and HDAC3 in cell-free assays, respectively).<sup>1</sup> It has been shown to upregulate frataxin mRNA levels in cultured cells obtained from Friedreich's ataxia patients and in a GAA repeat-based mouse model of Friedreich's ataxia.<sup>1</sup>

### Reference

1. Rai, M., Soragni, E., Chou, C.J., *et al.* Two new pimelic diphenylamide HDAC inhibitors induce sustained frataxin upregulation in cells from Friedreich's ataxia patients and in a mouse model. *PLoS One* **5(1)**, e8825 (2010).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/01/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM