# **PRODUCT** INFORMATION



NI-57

Item No. 17662

| CAS Registry No.: | 1883548-89-7                                  | Η.            |
|-------------------|---|---------------|
| Formal Name:      | 4-cyano-N-(1,2-dihydro-1,3-                   |               |
|                   | dimethyl-2-oxo-6-quinolinyl)-2-               | 0=S           |
|                   | methoxy-benzenesulfonamide                    |               |
| MF:               | $C_{19}H_{17}N_{3}O_{4}S$                     |               |
| FW:               | 383.4   |               |
| Purity:           | ≥98%  |               |
| UV/Vis.:          | λ <sub>max</sub> : 210, 236, 279, 310, 334 nm | $\rightarrow$ |
| Supplied as:      | A crystalline solid                           | L<br>CN       |
| Storage:          | -20°C   |               |
| Stability:        | ≥4 years                                      |               |
|                   |   |               |

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

# Laboratory Procedures

NI-57 is supplied as a crystalline solid. A stock solution may be made by dissolving the NI-57 in the solvent of choice. NI-57 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of NI-57 in these solvents is approximately 25 and 30 mg/ml, respectively.

NI-57 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NI-57 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. NI-57 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

# Description

The bromodomain and PHD finger-containing (BRPF) proteins are scaffolding components of chromatinbinding MOZ/MORF histone acetyltransferase complexes, which have activity as transcriptional regulators.<sup>1,2</sup> BRPF1 (BR140 or Peregrin) is important for maintaining Hox gene expression and the development of multiple tissues, axial skeleton, and the hematopoietic system.<sup>2</sup> NI-57 is a potent inhibitor of the bromodomains of BRPF proteins that binds to BRPF1B, BRPF2, and BRPF3 with  $K_d$  values of 31, 108, and 408 nM, respectively, as determined by isothermal titration calorimetry. It is selective for BRPFs over other bromodomains. NI-57 shows accelerated FRAP recovery at 1  $\mu$ M in the BRPF2 FRAP assay, preventing binding of full-length BRPF2 to chromatin. See the Structural Genomics Consortium (SGC) website for more information.

# References

- 1. Ullah, M., Pelletier, N., Xiao, L., et al. Molecular architecture of quartet MOZ/MORF histone acetyltransferase complexes. Mol. Cell Biol. 28(22), 6828-6843 (2008).
- 2. Klein, B.J., Lalonde, M.-E., Cōté, J., et al. Crosstalk between epigenetic readers regulates the MOZ/MORF HAT complexes. Epigenetics 9(2), 186-193 (2014).

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

## SAFFTY 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.

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