# Product Datasheet

## Technical Data

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|---|---|---|---|---|---|---|
| **Formula** | $C_{58}H_{62}Cl_3F_2N_9O_7S$ | | | | | |
| **Molecular Weight** | 1173.59 | **CAS No.** | 2064292-12-0 | | | |
| **Solubility (25°C)*** | In vitro | DMSO | 100 mg/mL (85.2 mM) | | | |
| | | Ethanol | 100 mg/mL (85.2 mM) | | | |
| | | Water | Insoluble | | | |
| | *In vivo* (Add solvents to the product individually and in order) | Oral Administration | Homogeneous suspension | CMC-NA | ≥5mg/ml | Taking the 1 mL working solution as an example, add 5 mg of this product to 1 ml of CMC-Na solution, mix evenly to obtain a homogeneous suspension with a final concentration of 5 mg/ml. |
| | | Injection | Clear solution | 5%DMSO [1] → 40%PEG300 [2] → 5%Tween80 [3] → 50%ddH2O<br>Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing. | 5.000mg/ml (4.26mM) | Taking the 1 mL working solution as an example, add 50 μL of 100 mg/ml clarified DMSO stock solution to 400 μL of PEG300, mix evenly to clarify it; add 50 μL of Tween80 to the above system, mix evenly to clarify; then continue to add 500 μL of ddH2O to adjust the volume to 1 mL.<br>The mixed solution should be used immediately for optimal results. |
| | | | Clear solution | 5% DMSO [1] → 95% Corn oil<br>Validated by Capsid Bio labs. Should you need adjustments to this formulation, contact our sales team for custom testing. | 0.625mg/ml (0.53mM) | Taking the 1 mL working solution as an example, add 50 μL of 12.5 mg/ml clear DMSO stock solution to 950 μL of corn oil and mix evenly.<br>The mixed solution should be used immediately for optimal results. |

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Capsid Bio tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.
* Room temperature shipping (Stability testing shows this product can be shipped at 2-8°C for storage purposes.)

## Preparing Stock Solutions

| Concentration \ Volume / Mass | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 0.8521 mL | 4.2604 mL | 8.5209 mL |
| 5 mM | 0.1704 mL | 0.8521 mL | 1.7042 mL |
| 10 mM | 0.0852 mL | 0.4260 mL | 0.8521 mL |
| 50 mM | 0.0170 mL | 0.0852 mL | 0.1704 mL |

## Biological Activity

| | |
|---|---|
| **Description** | A1874 is a much improved nutlin-based, **BRD4-degrading PROTAC** and is able to degrade its target protein by 98% with nanomolar potency. |
| **Targets** | BRD4 [1] |
| **In vitro** | In HCT116 cells, A1874 causes a 97% decrease in viability and in A375 cells, this compound causes a 98% loss of viability. It reduced viability of Daudi cells by 70% and of MOLM-13 cells by 95%.[1] |

## Protocol (from reference)

**Cell Assay:**[1]

- **Cell lines**
  HCT116 cell lines
- **Concentrations**
  0-10 μM
- **Incubation Time**
  24 h
- **Method**
  Treatment of HCT116 cells for 24 hours with increasing concentrations of A1874 induced a dose-dependent knockdown of BRD4 levels, with near-maximum knockdown by 100 nmol/L and a maximum degradation (Dmax) of BRD4 of 98% of the levels in control(0.1% DMSO-treated) cells.

## References

https://pubmed.ncbi.nlm.nih.gov/30385614/

**RETURN POLICY**

Capsid Bio's Unconditional Return Policy ensures a smooth online shopping experience for our customers. If you are in any way unsatisfied with your purchase, you may return any item(s) within 7 days of receiving it. In the event of product quality issues, either protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please follow the instructions below when returning products.

**SHIPPING & STORAGE**

Capsid Bio products are transported at room temperature. If you receive the product at room temperature, please rest assured, the Capsid Bio Quality Inspection Department has conducted experiments to verify that the normal temperature placement of one month will not affect the biological activity of powder products. After collecting, please store the product according to the requirements described in the datasheet. Most Capsid Bio products are stable under the recommended conditions.

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**


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