# PRODUCT INFORMATION



## DM1-SMCC

Item No. 23926

CAS Registry No.: 1228105-51-8

Formal Name: N2'-deacetyl-N2'-[3-[[1-[[4-[[(2,5-dioxo-

> 1-pyrrolidinyl)oxy|carbonyl|cyclohexyl| methyl]-2,5-dioxo-3-pyrrolidinyl]thio]-1-

oxopropyl]-maytansine

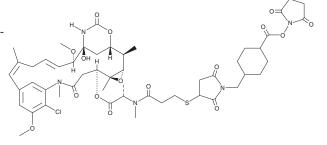
Synonym: SMCC-DM1 MF: C<sub>51</sub>H<sub>66</sub>CIN<sub>5</sub>O<sub>16</sub>S

FW: 1,072.6 **Purity:** ≥98%

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥2 years

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



### **Laboratory Procedures**

DM1-SMCC is supplied as a crystalline solid. A stock solution may be made by dissolving the DM1-SMCC in the solvent of choice. DM1-SMCC is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of DM1-SMCC in these solvents is approximately 12 and 16 mg/ml, respectively.

DM1-SMCC is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, DM1-SMCC should first be dissolved in DMF and then diluted with the aqueous buffer of choice. DM1-SMCC has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

DM1-SMCC is a cleavable linker-based antibody-drug conjugate (ADC) containing the maytansinoid DM1 (mertansine; Item No. 22483) and the crosslinker SMCC. 1,2 ADCs target specific cell populations to induce a selective response, such as cell death in cancer cells. DM1-SMCC conjugated to an anti-CD70 antibody has been used to study the transport of the ADC catabolites into the cell cytoplasm of 786-0 renal cell carcinoma cells.

#### References

- 1. Luo, Q., Chung, H.H., Borths, C., et al. Structural characterization of a monoclonal antibody-maytansinoid immunoconjugate. Anal. Chem. 88(1), 695-702 (2016).
- 2. Hamblett, K.J., Jacob, A.P., Gurgel, J.L., et al. SLC46A3 is required to transport catabolites of noncleavable antibody maytansine conjugates from the lusosome to the cytoplasm. Cancer Res. 75(24), 5329-5340 (2015).

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

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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