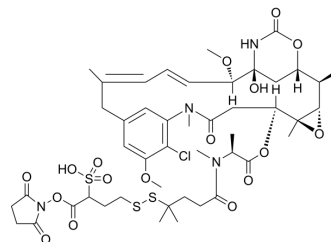


## sulfo-SPDB-DM4

|                    |   |
|--------------------|---|
| Cat. No.:          | HY-101141   |
| CAS No.:           | 1626359-59-8  |
| Molecular Formula: | C <sub>46</sub> H <sub>63</sub> ClN <sub>4</sub> O <sub>17</sub> S <sub>3</sub> |
| Molecular Weight:  | 1075.66   |
| Target:            | Drug-Linker Conjugates for ADC  |
| Pathway:           | Antibody-drug Conjugate/ADC Related   |
| Storage:           | -80°C, protect from light, stored under nitrogen                                |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 50 mg/mL (46.48 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent       |      | 1 mg      | 5 mg      | 10 mg     |
|---------------------------|---------------|------|-----------|-----------|-----------|
|                           | Concentration | Mass |           |           |           |
|                           | 1 mM          |      | 0.9297 mL | 4.6483 mL | 9.2966 mL |
|                           | 5 mM          |      | 0.1859 mL | 0.9297 mL | 1.8593 mL |
|                           | 10 mM         |      | 0.0930 mL | 0.4648 mL | 0.9297 mL |

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

sulfo-SPDB-DM4 is a agent-linker conjugate for ADC by using the maytansinebased payload (DM4, an antitubulin agent) via the sulfo-SPDB linker.

#### IC<sub>50</sub> & Target

Maytansinoids

#### In Vitro

DM4, a structural analogue of maytansine, is a new thiol-containing and potent maytansinoid. DM4 is a cytotoxic maytansinoid drug. It is synthesized in order to link maytansinoids to antibodies via disulfide bonds. Maytansinoids inhibit tubulin polymerization and microtubule assembly and enhance microtubule destabilization, so there is potent suppression of microtubule dynamics resulting in a mitotic block and subsequent apoptotic cell death<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Tang R, et al. P-gp activity is a critical resistance factor against AVE9633 and DM4 cytotoxicity in leukaemia cell lines, but not a major mechanism of chemoresistance in cells from acute myeloid leukaemia patients. BMC Cancer. 2009 Jun 23;9:199.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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