

Catalog# BP-50163

## **Streptavidin-DM1**

## **Description:**

Streptavidin-DM1 is a Protein-drug conjugate (PDC) of Streptavidin with microtubule-inhibiting drug DM1 (Mertansine) conjugate through a linker. >95% Streptavidin were conjugated with DM1, the DPR (drug protein ratio) n = 1-3 drugs per protein. Streptavidin is a 52.8 kD tetrameric protein obtained from Streptomyces avidinii. It binds to biotin with a very high affinity and is one of the strongest interactions in nature with a dissociation constant of 10-14 mol/L. It is used in a wide range of applications including ELISA, flow cytometry, molecular biology, and bionanotechnology. DM1 (Mertansine) is a microtubule-inhibiting drug that is a synthetic derivative of maytansine and is used as a potential cancer treatment. DM1 can be attached to a monoclonal antibody or proteins with a linker to create a conjugate that is developed to overcome systemic toxicity associated with maytansine and to enhance tumor-specific delivery. DM1 is a strong antiproliferative chemotherapeutics toward over 60 types of cancer cell lines. This product is for research use only. The Streptavidin-DM1 has the following chemical structure:



| Product Details             |   |
|-----------------------------|---|
| Reactivity                  | Bind to Biotin                                    |
| Source                      | E. coli   |
| Туре                        | Recombinant protein                               |
| Specific Activity           | >15.0 U/mg protein                                |
| M.W.                        | 52,800  |
| Measurement                 | A280 of 0.1% solution: 3.2                        |
| Isoelectric point (pI)      | 6.8 to 7.5  |
| Conjugate                   | Streptavidin conjugated with SMCC-DM1             |
| DPR (Drug to Protein Ratio) | >95% protein conjugated, 1-3 drugs per protein    |
| Form                        | Liquid  |
| Concentration               | 1 mg/ml   |
| Purification                | Size Exclusive Column                             |
| Storage buffer              | 20 mM Sodium Borate, 6% Trehalose, pH8.0          |
| Storage conditions          | 4°C for short time, -20°C or -80°C for long time. |