

Catalog# BP-50153

Protein A -DM1

Description:

Protein A-DM1 is a Protein-drug conjugate (PDC) of Protein A with with microtubule-inhibiting drug DM1 (Mertansine) conjugate through a linker. >95% protein A were conjugated with DM1, the DPR (drug protein ratio) n = 1-3 drugs per protein. Protein A is a 42 kDa surface protein originally found in the cell wall of the bacterium Staphylococcus aureus. The protein is composed of five homologous Ig-binding domains that fold into a three-helix bundle. Each domain can bind proteins from many mammalian species, most notably IgGs (immunoglobulins). Protein A has the remarkable ability to bind to the Fc region of most immunoglobulins. It binds the heavy chain within the Fc region of most immunoglobulins and also within the Fab region in the case of the human VH3 family. 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 Protein A-DM1 has the following chemical structure:



Product Details	
Reactivity	Bind to the Fc region of most immunoglobulins
Source	E. coli
Туре	Recombinant Protein
M.W.	~44,600 (Apparent MW by SDS-PAGE: 45,000)
Measurement	A275 of 0.1% solution: ~0.149
Isoelectric point (pI)	4.7-4.8
Conjugate	Protein A 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.