
MD1

产品编号: D10766

CAS: 139504-50-0

保存条件: Store at -20°C stable for 3 years.

产品介绍: Mertansine, also called DM1 (and in some of its forms emtansine), is a thiol-containing maytansinoid that for therapeutic purposes is attached to a monoclonal antibody through reaction of the thiol group with a linker structure to create an antibody-drug conjugate (ADC). Mertansine is a tubulin inhibitor, meaning that it inhibits the assembly of microtubules by binding to tubulin (at the rhizoxin binding site). The monoclonal antibody binds specifically to a structure (usually a protein) occurring in a tumour, thus directing mertansine into this tumour. This concept is called targeted therapy. Trastuzumab emtansine also known as ado-trastuzumab emtansine and sold under the trade name Kadcyla, is an antibody-drug conjugate consisting of the humanized monoclonal antibody trastuzumab (Herceptin) covalently linked to the cytotoxic agent DM1. Trastuzumab alone stops growth of cancer cells by binding to the HER2 receptor, whereas trastuzumab emtansine undergoes receptor-mediated internalization into cells, is catabolized in lysosomes where DM1-containing catabolites are released and subsequently bind tubulin to cause mitotic arrest and cell death. Trastuzumab binding to HER2 prevents homodimerization or heterodimerization (HER2/HER3) of the receptor, ultimately inhibiting the activation of MAPK and PI3K/AKT cellular signalling pathways. Because the monoclonal antibody targets HER2, and HER2 is only over-expressed in cancer cells, the conjugate delivers the cytotoxic agent DM1 specifically to tumor cells.

基本信息:

CAS: 139504-50-0

分子式: C₃₅H₄₈ClN₃O₁₀S

分子量: 738.28772

MDL: MFCD28398157

纯度: ≥99%

溶解性: 溶于DMSO (62.5 mg/mL, ≈84.66 mM; Need ultrasonic)

产品简介:

Mertansine (DM1) 是一种微管蛋白抑制剂, 也是一种抗体可缀合的美登木素生物碱, 用于克服与

美登素相关的全身毒性并增强肿瘤特异性递送。Mertansine可以通过连接体连接到单克隆抗体上，形成抗体偶联药物 (ADC)。

作用靶点：Microtubule/Tubulin; ADC Cytotoxin;

作用通路：Cell Cycle/DNA Damage; Cytoskeleton; Antibody-drug Conjugate/ADC Related;