



Mouse Anti-mPEG monoclonal antibody, clone 26-3c (CABT-RM165)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Specifically detects proteins conjugated with methoxy polyethylene glycol (mPEG).
Target	mPEG
Immunogen	Methoxy PEG covalently conjugated to E.coli beta-glucuronidase.
Isotype	IgG2b, κ
Source/Host	Mouse
Species Reactivity	All
Clone	26-3c
Purification	Protein A purified
Conjugate	unconjugated
Applications	ELISA
Format	Liquid
Size	100 µg
Buffer	PBS
Preservative	0.04% sodium azide.
Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction

Polyethylene glycols (PEG) are non-toxic, uncharged, hydrophilic long chain polymers with a big exclusion volume in aqueous solutions. The covalent attachment of PEG is commonly employed to modify proteins and drugs that can increase their bioavailability and reduce immunogenicity and proteolytic degradation. The monomethoxylated form of polyethylene glycol (mPEG) has been widely employed in drug modifications. mPEG modification reduces nonspecific binding and prevents recognition by the reticuloendothelial system. This monoclonal antibody specifically binds to the terminal methoxy group, but not the backbone of PEG. It displays high affinity for the terminal methoxy group and can be easily used as a detection antibody for the quantification of mPEG by ELISA. It is also suitable for detection of PEGylated liposomes and nanoparticles. The mPEG cell-based competition ELISA can detect lower molecular-weight (< 2 kDa) mPEG molecules even at nanomolar concentration and the assay is not affected by the presence of mouse or human serum. In addition, mPEG cell-based ELISA can be useful in determining the pharmacokinetics of a mPEG molecule in an animal without the need for any radiolabeling.

Keywords

mPEG; methoxy Polyethylen Glycol; PEG