



# Mouse Anti-Gamithromycin Monoclonal Antibody, clone GMM (CABT-Z527M)

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

## PRODUCT INFORMATION

Immunogen	Gamithromycin-KLH
Isotype	IgG
Source/Host	Mouse
Species Reactivity	N/A
Clone	GMM
Purification	Protein A purified
Conjugate	Unconjugated
Applications	ELISA, LFIA
Format	Liquid
Concentration	Lot specific
Size	1 mg
Buffer	PBS
Preservative	None
Storage	Store at -20°C long term. Avoid freeze / thaw cycle.
Ship	Wet ice

## BACKGROUND

## Introduction

Gamithromycin, the active pharmaceutical ingredient of ZACTRAN is a novel 7a-azalide that has been developed for treatment and prevention of bovine respiratory disease (BRD). The compound belongs to the 15-membered semi-synthetic macrolide antibiotics of the azalide subclass with a uniquely positioned alkylated nitrogen at the 7a-position of the lactone ring. Macrolide antibiotics in general have bacteriostatic action by inhibiting bacterial RNA dependent protein biosynthesis, but can also be bactericidal. They reversibly bind to 23S ribosomal RNA in the 50S-subunit of prokaryotic ribosomes and prevent protein elongation during the translocation process. In vitro data show that gamithromycin has both bactericidal and bacteriostatic actions at least at the higher concentrations found in lung tissue. The broad spectrum antimicrobial activity of gamithromycin includes *Mannheimia haemolytica*, *Pasteurella multocida* and *Histophilus somni*, the bacterial pathogens most commonly associated with BRD. Gamithromycin administered subcutaneously is well absorbed and fully bioavailable, and safe for the target animal receiving doses up to five times the recommended dose at 30 mg / kg body weight. Following s.c. administration, gamithromycin is extensively and rapidly distributed to lung tissue, the site of respiratory infection.

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## Keywords

Gamithromycin;GMM;C40H76N2O12

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