



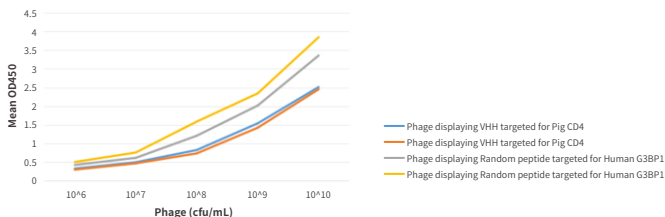
M13 Bacteriophage Antibody (HRP), Monoclonal Antibody

Catalog#JKR000112

Product Code	JKR000112
Storage	Upon receipt, store at -20°C, Protected from prolonged exposure to light, Avoid repeated freeze.
Immunogen	M13 Bacteriophage
Raised In	Mouse
Species Reactivity	Human, Mouse, Rat, Rabbit
Tested Applications	ELISA; Recommended dilution: 1:1000 in ELISA.
Relevance	<p>M13 is a filamentous bacteriophage composed of circular single stranded DNA (ssDNA) which is 6407 nucleotides long encapsulated in approximately 2700 copies of the major coat protein P8, and capped with 5 copies of two different minor coat proteins (P9, P6, P3) on the ends. Infection with filamentous phages is not lethal, however the infection causes turbid plaques in E. coli. It is a non-lytic virus. However a decrease in the rate of cell growth is seen in the infected cells. M13 plasmids are used for many recombinant DNA processes, and the virus has also been studied for its uses in nanostructures and nanotechnology. The phage coat is primarily assembled from a 50 amino acid protein called pVIII (or p8), which is encoded by gene VIII (or g8) in the phage genome. For a wild type M13 particle, it takes about approximately 2700 copies of p8 to make the coat about 900 nm long. The coat's dimensions are flexible though and the number of p8 copies adjusts to accommodate the size of the single stranded genome it packages. The general stages to a viral life cycle are: infection, replication of the viral genome, assembly of new viral particles and then release of the progeny particles from the host. Filamentous phage use a bacterial structure known as the F pilus to infect E. coli, with the M13 p3 tip contacting the TolA protein on the bacterial pilus. The phage genome is then transferred to the cytoplasm of the bacterial cell where resident proteins convert the single stranded DNA genome to a double stranded replicative form.</p>
Form	Liquid
Conjugate	HRP-conjugated

Storage Buffer	Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	>95%, Protein A purified
Isotype	IgG2a
Clonality	Mouse Monoclonal
Product Type	Monoclonal Antibody
Immunogen Species	M13 Bacteriophage
Clone No.	9H10
Applications	ELISA, This antibody can be used at 0.5-1 µg/mL in ELISA

Sensitivity analysis of M13 Antibody (HRP)



Introduction

Coating: Coat corresponding Protein (0.5-5 µg/mL in pH 9.6 carbonate buffer) in Corning Microplate

Sample: Add the indicated amounts of M13 Bacteriophages displaying VHH /Random peptide targeted for different proteins

Detection Antibody: M13 Antibody-HRP (JKR000112), 0.1-0.365 µg/mL

References

Gut-targeted nanoparticles deliver specifically targeted antimicrobial peptides against Clostridium perfringens infections

Bocheng Xu 1, Weike Shaoyong 1, Lin Wang 1, Chen Yang 2, Ting jun Chen 3, Xiao Jiang 1, Rong Yan 1, Zipeng Jiang 1, Pan Zhang 3, Mingliang Jin 1,* , Yizhen Wang 1,*



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