BM5516HRP

Monoclonal Antibody to M13, fd, F1 Filamentous Phages - HRP

Alternate names: Coat protein B, Gene 8 protein, Major coat protein

Quantity: 0.75 ml

Background: 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. The minor coat protein P3 attaches to the receptor at the tip of the F pilus of the host Escherichia coli. 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. Antibodies to M13 filamentous phage coat proteins are instrumental in the selection and detection of phages expressing specific antibody fragments or peptide sequences at their surface.

The display of repertoires of antibody fragments on the surface of filamentous phage offers a new way to produce immunoreagents with defined specificities.

Phage derived antibody fragments offer a number of advantages over mouse monoclonal antibodies, such as better clearance from the blood, the possibility to select from human combinatorial libraries and the relative ease by which such fragments can be manipulated.

The phage display technique thus facilitates the selection of antibody fragments of therapeutic value or research interest.

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Uniprot ID: P69541
NCBI: NP_510890
GeneID: 927333

Host / Isotype: Mouse / IgG2b
Clone: B62-FE2
Immunogen: fd phages from E. coli F+ strain (JM109).

Format: State: Liquid purified IgG fraction
Purification: Affinity Chromatography on Protein A
Preservatives: 0.01% Thimerosal
Label: HRP

Phage Display (Immunoassays for the identification of recombinant antigen- or antibody-phages).
Detection Limit: 10⁷ phage particles.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity: B62-FE2 binds to an epitope on pVIII (phage coat protein) covering the N-terminal region of g8p AEGDDPAAFDSLQASAT (See Kneissel et al.).

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: