Overview

Product name
Anti-M13 Bacteriophage Coat Protein g8p antibody [RL-ph2] ab9225

Description
Mouse monoclonal [RL-ph2] to M13 Bacteriophage Coat Protein g8p

Host species
Mouse

Specificity
RL-ph2 reacts with the major M13 filamentous phage coat protein g8p with a molecular weight of 5 kDa.

Tested applications
Suitable for: ICC, Flow Cyt, WB

Species reactivity
Reacts with: Other species

Immunogen
Fusion protein corresponding to M13 Bacteriophage Coat Protein g8p. Isolated M13 phage coat proteins

Database link: P69541

General notes

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. 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.

Properties

Form
Liquid

Storage instructions
Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Storage buffer
Preservative: 0.09% Sodium azide
Constituent: PBS

Purity
Protein A purified

Primary antibody notes
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<table>
<thead>
<tr>
<th>Clonality</th>
<th>Monoclonal</th>
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<tbody>
<tr>
<td>Clone number</td>
<td>RL-ph2</td>
</tr>
<tr>
<td>Myeloma</td>
<td>Sp2/0-Ag14</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG2a</td>
</tr>
<tr>
<td>Light chain type</td>
<td>kappa</td>
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</tbody>
</table>

Applications

Our Abpromise guarantee covers the use of ab9225 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICC</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>Flow Cyt</td>
<td>1/25 - 1/200.</td>
<td>ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.</td>
</tr>
<tr>
<td>WB</td>
<td>1/100 - 1/1000.</td>
<td>Detects a band of approximately 5 kDa (predicted molecular weight: 5 kDa).</td>
</tr>
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Target

Relevance

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.

Images
Anti-M13 Bacteriophage Coat Protein g8p antibody [RL-ph2] (ab9225) at 1/1000 dilution + whole cell lysate prepared from XL10Gold cells at 50 µg

**Secondary**
Rabbit Anti-Mouse IgG H&L (HRP) (ab6728) at 1/2000 dilution

**Predicted band size:** 5 kDa  
**Observed band size:** 6 kDa

**why is the actual band size different from the predicted?**

Primary antibody incubated for 16 hours at 4°C.  
Blocking step performed using 5% milk for 1 hour at room temperature.

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**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"  

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