Datasheet: MCA5639

Description: MOUSE ANTI HUMAN APOLIPOPROTEIN E
Specificity: APOLIPOPROTEIN E
Format: Purified
Product Type: Monoclonal Antibody
Clone: WUE-4
Isotype: IgG1
Quantity: 0.2 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.biorad-antibodies.com/protocols.

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Immunohistology - Frozen</td>
<td></td>
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<tr>
<td>Immunohistology - Paraffin</td>
<td></td>
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<tr>
<td>ELISA</td>
<td></td>
<td></td>
<td></td>
<td>1/100 - 1/1000</td>
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<tr>
<td>Immunoprecipitation</td>
<td></td>
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<td></td>
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<tr>
<td>Western Blotting</td>
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</table>

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse
Does not react with: Sea Lion, Harbour seal

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<table>
<thead>
<tr>
<th><strong>Buffer Solution</strong></th>
<th>Phosphate buffered saline</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preservative</strong></td>
<td></td>
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<tr>
<td><strong>Stabilisers</strong></td>
<td>0.09% Sodium Azide (NaN₃)</td>
</tr>
<tr>
<td><strong>Carrier Free</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Approx. Protein</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Concentrations</strong></td>
<td>IgG concentration 1.0 mg/ml</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Purified ApoHDL fraction.</td>
</tr>
</tbody>
</table>

**External Database Links**

- **UniProt:** P02649  Related reagents
- **Entrez Gene:** 348  APOE  Related reagents

**RRID**

AB_10841622

**Fusion Partners**

Spleen cells from immunised Balb/c mice were fused with cells of the Sp2/O-Ag14 mouse myeloma cell line.

**Specificity**

Mouse anti Human Apolipoprotein E antibody, clone WUE-4 recognizes an epitope within amino acids 140-160 of human apolipoprotein E (Apo-E), a major component of very low-density lipoproteins (VLDLs). Apo-E is the principle apolipoprotein in the central nervous system, and is secreted by most organs into the plasma, playing a vital role in the binding, internalization and catabolism of triglyceride-rich lipoprotein constituents.

Apo-E acts as a ligand for both the specific apo-E receptor (chylomicron remnant) of hepatic tissues, and the apoB,E (LDL) receptor. Three isoforms of Apo-E have been identified, ApoE2, E3 and E4, and have been linked with various disorders. ApoE2 has been shown to bind LPL receptors with low affinity, resulting in increased plasma cholesterol and triglyceride levels, and thereby an increased risk in cardiovascular disorders. ApoE4 is a high risk factor for Alzheimer's disease (Sanan et al. 1994), and in particular late onset Alzheimer disease 2 (AD2), whilst ApoE3 is the most common isoform, and considered the normal/natural Apo-E genotype.

Mouse anti Human Apolipoprotein E antibody, clone WUE-4 has been shown to inhibit Apo-E mediated binding of lipoproteins to the apoB,E cell receptor (Krul et al. 1998).

**Western Blotting**

MCA5639 detects a major band of approximately 34-36kDa in human liver cell lysates.

**References**


### Storage
This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

### Guarantee
12 months from date of despatch

### Health And Safety Information

### Regulatory
For research purposes only

### Related Products

#### Recommended Secondary Antibodies

<table>
<thead>
<tr>
<th>Antibody Type</th>
<th>Goat Anti Mouse IgG (STAR77...)</th>
<th>HRP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rabbit Anti Mouse IgG (STAR12...)</td>
<td>RPE</td>
</tr>
<tr>
<td></td>
<td>Goat Anti Mouse IgG (STAR70...)</td>
<td>FITC</td>
</tr>
<tr>
<td></td>
<td>Goat Anti Mouse IgA IgM (STAR87...)</td>
<td>Alk. Phos., HRP</td>
</tr>
</tbody>
</table>
Goat Anti Mouse IgG (STAR76...) RPE
Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP
Rabbit Anti Mouse IgG (STAR13...) HRP
Rabbit Anti Mouse IgG (STAR9...) FITC
Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M384541:210513'

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