Product Details

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.bio-rad-antibodies.com/protocols.

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

**Buffer Solution**
Phosphate buffered saline

**Preservative Stabilisers**
0.09% Sodium Azide (NaN$_3$)

**Carrier Free**
Yes

**Approx. Protein Concentrations**
IgG concentration 1.0 mg/ml

**Immunogen**
Purified ApoHDL fraction.

**External Database Links**

- **UniProt:**
  - P02649

- **Entrez Gene:**
  - 348 APOE

**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 Alzheimers 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**

2. Fryer, J.D. *et al.* (2005) The low density lipoprotein receptor regulates the level of


Storage
Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee
12 months from date of despatch

Health And Safety Information
Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA5639
10040

Regulatory
For research purposes only

Related Products
Recommended Secondary Antibodies
Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE
Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...) RPE
Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP
Rabbit Anti Mouse IgG (STAR13...) HRP
Goat Anti Mouse IgG (STAR70...) FITC
Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...) FITC

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

'M368261:200529'

Printed on 12 Aug 2023