APOL1-Specific Monoclonal ANTIBODY

Catalog Number: 66124-1-Ig

Basic Information

- **Catalog Number**: 66124-1-Ig
- **Size**: 236 μg/150 μl
- **Source**: Mouse
- **Isotype**: IgG2a
- **Purification Method**: Protein A purification
- **Immunogen Catalog Number**: AG2016
- **GeneBank Accession Number**: BCO17201
- **GeneID (NCBI)**: 8542
- **Full Name**: apolipoprotein L, 1
- **Calculated MW**: 44 kDa
- **Observed MW**: 39-45 kDa
- **Recommended Dilutions**:
  - **WB**: 1:20,000-1:100,000
  - **IP**: 0.5-4.0 μg for IP and 1:1,000-1:5,000 for WB
  - **IHC**: 1:50-1:100
  - **IF**: 1:50-1:500

Applications

- **Tested Applications**: FC, IF, IHC, IP, WB, ELISA
- **Cited Applications**: IF, WB
- **Species Specificity**: human

Background Information

- Human apolipo-protein L1 (APOL1) is a minor component of plasma high density lipoprotein (HDL) particles, acting as an interacting protein of apolipoprotein A1 (ApoA1). The human ApoL protein family was thought to be predominantly involved in lipid transport and metabolism. APOL1 is also involved in host innate immunity against Trypanosoma parasites. Once activated, APOL1 can lyse the parasite and protect human from infection. Genetic variants in APOL1 gene, which are found in African ancestry with high frequency, associate with chronic kidney disease, like focal segmental glomerulosclerosis (FSGS), HIV-associated nephropathy (HIVAN), and hypertensive nephropathy. APOL1 share structural and functional similarities with proteins of the Bcl-2 family and may has roles in apoptosis and autophagy. It is notable that APOL1 exists only in human and a few other primate species, and mouse does not express an APOL1 orthologue. This antibody recognizes the endogenous ApoL1 of 39-45 kDa in blood lysate. This antibody is specific to APOL1.

Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hongxiu Wen</td>
<td>29967295</td>
<td>Biosci Rep</td>
<td>WB, IF</td>
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</table>

Storage

- **Storage**: Store at -20°C. Stable for one year after shipment.
- **Storage Buffer**: PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**
Selected Validation Data

Immunohistochemical of paraffin-embedded human liver using 66124-1-Ig (APOL1 antibody) at dilution of 1:500 (under 10x lens).

1.5 μg human plasma tissue was subjected to SDS PAGE followed by western blot with 66124-1-Ig (APOL1 Antibody) at dilution of 1:200, 000 incubated at room temperature for 1.5 hours.

IP Result of anti-APOL1 (IP:66124-1-Ig, 5ug; Detection:66124-1-Ig 1:10000) with human plasma tissue lysate 4000ug.

Immunofluorescent analysis of (−20°C Ethanol) fixed HepG2 cells using 66124-1-Ig (APOL1 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).

1.0 X 10⁶ HepG2 cells were stained with 0.2ug APOL1 antibody (66124-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1000.