Anti-Human FGA Antibody [KT9]

Catalog No. K03008R02C02C

**Overview**

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>Anti-Human FGA Antibody [KT9]</th>
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</thead>
<tbody>
<tr>
<td><strong>Antibody specificity</strong></td>
<td>Fibrinogen (FGA)</td>
</tr>
<tr>
<td><strong>Species reactivity</strong></td>
<td>Human</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Clone number</strong></td>
<td>KT9</td>
</tr>
<tr>
<td><strong>Host / isotype</strong></td>
<td>Rat / IgG2a</td>
</tr>
<tr>
<td><strong>Immunogen</strong></td>
<td>Fibrinogen purified from human blood containing α, β and γ chains</td>
</tr>
<tr>
<td><strong>Cross reactivity</strong></td>
<td>Not tested</td>
</tr>
<tr>
<td><strong>Kinetic characterization by BLI (biolayer interferometry)</strong></td>
<td>Not tested</td>
</tr>
<tr>
<td><strong>Purification</strong></td>
<td>Protein G purified from cell culture supernatants</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Concentration</strong></td>
<td>1 mg/mL in phosphate buffered saline containing 0.09% preservative</td>
</tr>
<tr>
<td><strong>Conjugation</strong></td>
<td>Unconjugated</td>
</tr>
</tbody>
</table>

**Shipping, storage and shelf life**
- * 3 months when stored at 2 to 8 °C
- * 1 year when aliquoted and stored at -20 °C
- * 3 years when aliquoted and stored at -80 °C

**Applications**

<table>
<thead>
<tr>
<th><strong>Application</strong></th>
<th><strong>Recommended concentration</strong></th>
<th><strong>Note</strong></th>
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</thead>
<tbody>
<tr>
<td>Western blot (WB)</td>
<td>1 µg/mL</td>
<td></td>
</tr>
<tr>
<td>Indirect ELISA</td>
<td>1 µg/mL</td>
<td></td>
</tr>
<tr>
<td>Sandwich ELISA</td>
<td>5 µg/mL</td>
<td>KT9 can pair with peroxidase conjugated KT10 for sandwich ELISA. KT9 is used as the capture antibody.</td>
</tr>
<tr>
<td>Immunohistochemistry-paraffin (IHC-P)</td>
<td>2 µg/mL</td>
<td></td>
</tr>
<tr>
<td>Immunoprecipitation (IP)</td>
<td>10 µg/mL</td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
- * The applications above have already been verified. The antibody may be suitable for additional applications
- * Optimal antibody concentrations for each application should be determined by the user.

**Additional information**

- **Target antigen**
  - Protein name: Fibrinogen alpha chain
  - Gene name: FGA
  - UniProt Accession: P02671
  - Organism: Homo sapiens (Human)

- **Paired antibody information**
  - KT9 may pair with KT10 for sandwich based immune assays.
Western blotting
15 µg of human plasma was run on 6-18% SDS-PAGE under reducing conditions and blotted onto PVDF membrane. KT9 at 1 µg/mL was used as the primary antibody and peroxidase conjugated goat anti-rat IgG was used as the secondary antibody. FGA band was visualized using ECL Western Blotting Substrate.
Result: KT9 can detect human FGA by Western blotting.

Sandwich ELISA
Microtiter wells were coated with KT9 at 5 µg/mL as the capture antibody. Human FGA was used as the antigen. Peroxidase conjugated rat anti-human FGA monoclonal antibody (KT10) was used as the detection antibody.
Result: KT9 and KT10 can be used as a matched antibody pair to detect and quantify the concentration of FGA.

Immunohistochemistry
IHC-P analysis of human placenta tissue by anti-human FGA antibody (KT9).
IHC-P was performed using sections of the formalin-fixed paraffin-embedded human placenta tissue. Antigen was retrieved through addition of boiling Tris/EDTA buffer pH 9 in a pressure cooker for 3 min. Endogenous peroxidase activity was quenched by incubating the sections with 3% H2O2 for 30 min at room temperature. The sections were then incubated with anti-human FGA primary antibody (KT9) at 2 µg/mL at room temperature for 1 h. Poly-peroxidase conjugated goat anti-mouse IgG (which cross reacts with rat IgG) was used as the secondary antibody. Diaminobenzidine was used as the chromogen. The section was counterstained with hematoxylin.
Result: Decidual cells are positively stained at the cytoplasm and cell membrane.

Immunoprecipitation
Immunoprecipitation was performed by incubation of 2.5 µg KT9 with human plasma containing 200 µg total protein. After absorption with Protein G beads, the mixture was run on 6-18% SDS-PAGE and blotted onto nitrocellulose membrane. Anti-human FGA (KT9) at 1 µg/mL was used as the primary antibody and peroxidase conjugated rabbit anti-mouse light chain specific IgG (which cross reacts with rat IgG) was used as the secondary antibody. The isotype control antibody was KT82.
Lane 1: Human plasma
Lane 2: Human FGA immunoprecipitated from human plasma by KT9
Lane 3: The same as Lane 2 but KT82 was used as IgG isotype control antibody
Result: KT9 can immunoprecipitate human FGA.