PRODUCT INFORMATION

ANTI-CONJUGATED TAURINE ANTIBODIES
Ref: AP042

TARGET: Conjugated Taurine

IMMUNOGEN: Synthetic Taurine conjugated to protein carrier (PC)

SPECIFICITY: Using a conjugate Taurine-PC, antibody specificity was performed with an ELISA by competition experiments with the following compounds:

<table>
<thead>
<tr>
<th>Compounds</th>
<th>Cross-reactivity</th>
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</thead>
<tbody>
<tr>
<td>Taurine-PC</td>
<td>1</td>
</tr>
<tr>
<td>Hypotaurine-PC</td>
<td>1/&gt;15</td>
</tr>
<tr>
<td>GABA-PC</td>
<td>1/&gt;500</td>
</tr>
<tr>
<td>β-Alanine-PC</td>
<td>1/&gt;1,800</td>
</tr>
<tr>
<td>Aspartate-PC</td>
<td>1/&gt;5,000</td>
</tr>
<tr>
<td>Glycine-PC</td>
<td>1/&gt;14,000</td>
</tr>
<tr>
<td>Cystein-PC</td>
<td>1/&gt;20,000</td>
</tr>
<tr>
<td>Glutamate-PC</td>
<td>1/&gt;20,000</td>
</tr>
<tr>
<td>Methionine-PC</td>
<td>1/&gt;20,000</td>
</tr>
<tr>
<td>Taurine (free)</td>
<td>1/&gt;20,000</td>
</tr>
</tbody>
</table>

(a): Taurine-PC concentration/unconjugated or conjugated amino acids concentration at half displacement
RAISED IN: Rabbit

CLONALITY: Polyclonal

ISOTYPE: IgG

PURITY: Antiserum preabsorbed on protein carriers, purified by ammonium sulfate and/or by high trap column

FORM: Lyophilized

STORAGE INSTRUCTIONS:
Lyophilized vial must be stored at 4°C in a dry area. After reconstitution with 50μL of distilled water and 50μL of glycerol, the aliquot can be stored at -20°C, and is stable at least 2 years.

RESEARCH AREAS: Neurobiology

TESTED APPLICATIONS: Immunocytochemistry, Immunohistochemistry. Optimal dilutions should be determined by each laboratory for each application.

CORRESPONDING ANTIGEN:
Gemac sell the corresponding antigen: Taurine conjugate (ref: AG042)
REFERENCES


EXAMPLE OF IMMUNOHISTOCHEMICAL AND CYTOCHEMICAL APPLICATIONS

Detection of conjugated Taurine in rat brain

**Perfusion:** The rat is anaesthetized with sodium Pentobarbital or Nembutal and perfused intracardially through the aorta using a pump with the following solutions:

- Solution A (30mL): 200-300mL/min
- Solution B (500mL): 200-300mL/min

Solution A: cacodylate 0.1M, sodium metabisulfite 10g/L, pH = 6.2

Solution B: cacodylate 0.1M, sodium metabisulfite 10g/L and glutaraldehyde 3-5%; pH = 7.5

**Post fixation:** 15 to 30 min in solution B, then 4 soft washes in Tris 0.05M with sodium metabisulfite 8.5g/L, pH 7.5 (solution C).

**Tissue sectionning:** Cryostat or vibratome sections can be used.

**Reduction step:** Sections are reduced with the solution C containing sodium borohydride (0.1M) for 10 min. Then, the sections are washed 4 times with solution C without sodium borohydride.

**Application of anti-conjugated Taurine antibodies:** The final dilution is 1/2,000 to 1/5,000 in solution C containing triton X100 0.5%, plus 2% of non-specific serum. A dozen of sections can be incubated with 2mL of antibody solution overnight at 4°C. Then, after this period, the sections are washed 3 times (10 min) with solution C.

N.B.: Antibodies may be used at a higher dilution. The customer should explore the antibody dilution to reduce the possibility of high background. Note that a substitution in the buffer system as used in our protocol may change the background and the antibody recognition.

**PAP procedure:**

- **Second antibody:** Sections are incubated with 1/100 dilution of goat anti-rabbit in solution C for 3 hours at 20°C or 1 hour at 37°C. Then, they are washed 3 times (10 min) with solution C;

- **PAP:** Sections are incubated with 1/1,000 dilution of rabbit peroxidase anti-peroxidase complex in solution C for 1 hour at 37°C. Then, they are washed 3 times (10 min) with solution C;

- **Revelation:** Antibody-antigen complexes are revealed using diaminobenzidine (25mg/100mL) (or other chromogen) dissolved in Tris 0.05M and filtrated; 0.05% of H₂O₂ is added. The sections are incubated for 10 min at 20°C. Reaction is stopped by transferring sections in 5mL of Tris 0.05M.