### Basic Information

**Catalog Number:** 10708-1-AP  
**Size:** 26 μg/150 μl  
**Source:** Rabbit  
**Isotype:** IgG  
**Purification Method:** Antigen affinity purification  
**Immunogen Catalog Number:** AG1154  

**GenBank Accession Number:** BC004924  
**GeneID (NCBI):** 6303  
**Full Name:** spermidine/spermine N1-acetyltransferase 1  
**Calculated MW:** 20 kDa  
**Observed MW:** 25-30 kDa  

**Recommended Dilutions:**  
- WB: 1:200-1:1000  
- IP: 0.5-4.0 μg for IP and 1:200-1:1000 for WB  
- IHC: 1:200-1:1000

**Applications**  
- **Tested Applications:** IHC, IP, WB, ELISA  
- **Cited Applications:** IHC, WB  
- **Species Specificity:** human, mouse, rat  
  **Cited Species:** human, mouse, rat  
  **Note-IHC:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:**  
- WB: mouse liver tissue;  
- IP: mouse liver tissue;  
- IHC: human ovary tumor tissue

**Background Information**

Spermidine/spermine N1-acetyltransferase 1 (SAT1 or SSAT1) is the key regulatory enzyme in the catabolism of polyamines, catalyzing acetylation of spermidine or spermine to generate N1-acetyl spermidine or N1-acetyl spermine, and N1, N12-diacetylspermine. The cellular level of SAT1 is normally extremely low, but it is induced rapidly by a variety of stimuli, including polyamines, polyamine analogs, toxic chemicals, certain drugs, and growth factors. Downregulation of SAT1 has been reported in Epstein-Barr virus positive Burkitt’s lymphoma cells.

### Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
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<tbody>
<tr>
<td>Lewandowski Nicole MNM</td>
<td>20837543</td>
<td>Proc Natl Acad Sci U S A</td>
<td>IHC</td>
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<tr>
<td>Yan-Yan Wu</td>
<td>30257361</td>
<td>Biomed Pharmacother</td>
<td>WB</td>
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<tr>
<td>Qiong Yang</td>
<td>31350009</td>
<td>Gene</td>
<td>WB</td>
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**Storage**

- **Storage:** Store at -20°C. Stable for one year after shipment.  
- **Storage Buffer:** PBS with 0.1% sodium azide and 50% glycerol pH 7.3.  
- **Aliquoting is unnecessary for -20°C storage**
Selected Validation Data

**IP Result of anti-SAT1 (IP: 10708-1-AP, 4μg; Detection: 10708-1-AP 1:300) with mouse liver tissue lysate 4000μg.**

Immunohistochemical analysis of paraffin-embedded human ovary tumor using 10708-1-AP (SAT1 antibody) at dilution of 1:100 (under 10x lens).

Mouse liver tissue were subjected to SDS PAGE followed by western blot with 10708-1-AP SAT1 Antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.