**SIRT7**

**Polyclonal ANTIBODY**

Catalog Number: 12994-1-AP

**Basic Information**

- **Catalog Number:** 12994-1-AP
- **Size:** 31 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Antigen affinity purification
- **Immunogen Catalog Number:** AG3656
- **GenBank Accession Number:** BC017305
- **GeneID (NCBI):** 51547
- **Full Name:** sirtuin (silent mating type information regulation 2 homolog) 7 (S. cerevisiae)
- **Calculated MW:** 400aa, 45 kDa
- **Observed MW:** 45 kDa

**Recommended Dilutions:**
- **WB:** 1:500-1:1000
- **IP:** 0.5-4.0 μg for IP and 1:200-1:1000 for WB
- **IHC:** 1:50-1:500

**Applications**

- **Tested Applications:** ELISA, IHC, IP, WB
- **Cited Applications:** WB
- **Species Specificity:** human, mouse, rat

**Background Information**

SIRT7 (NAD-dependent deacetylase sirtuin-7), also known as SIR2L7, is a member of the class IV sirtuin family and is localized to the nucleolus. Expressed throughout the body, SIRT7 associates with rDNA genes where it interacts with histones and acts as a positive regulator of RNA polymerase I (Pol I). SIRT7 is a probable NAD-dependent deacetylase whose expression is upregulated in thyroid carcinoma cells. Overexpression of SIRT7 increases Pol I-mediated transcription, thereby speeding cell growth and contributing to the development of cancer.

**Notable Publications**

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<thead>
<tr>
<th>Author</th>
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<tbody>
<tr>
<td>Min Liu</td>
<td>28971079</td>
<td>Nat Commun</td>
<td>WB</td>
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<tr>
<td>Lei Sun</td>
<td>27035405</td>
<td>Int J Oncol</td>
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<tr>
<td>Li Cheng</td>
<td>26703810</td>
<td>Cell Death Dis</td>
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**Storage**

- **Store at:** -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.05% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

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For technical support and original validation data for this product, please contact:

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E: proteintech@ptglab.com
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Immunohistochemistry of paraffin-embedded rat liver tissue slide using 12994-1-AP (SIRT7 antibody) at dilution of 1:50 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer(pH8).

Mouse liver tissue were subjected to SDS PAGE followed by western blot with 12994-1-AP (SIRT7 antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.

IP Result of anti-SIRT7 (IP:12994-1-AP, 4ug; Detection:12994-1-AP 1:300) with mouse liver tissue lysate 4000ug.