### Basic Information

**Catalog Number:** 19429-1-AP  
**GenBank Accession Number:** BC000945  
**GeneID (NCBI):** 7922  
**Full Name:** solute carrier family 39 (zinc transporter), member 7  
**Calculated MW:** 469aa, 50 kDa  
**Observed MW:** 50 kDa, 56 kDa  

### Recommended Dilutions:
- **WB:** 1:1000-1:4000  
- **IP:** 0.5-4.0 μg for IP and 1:1000-1:1000 for WB  
- **IHC:** 1:20-1:200  

### Applications

<table>
<thead>
<tr>
<th>Tested Applications</th>
<th>Cited Applications</th>
<th>Positive Controls</th>
</tr>
</thead>
</table>
| IHC, IP, WB, ELISA  | IF, IHC, WB        | WB: mouse liver tissue, MCF-7 cells, rat liver tissue  
|                     |                    | IP: mouse brain tissue  
|                     |                    | IHC: human kidney tissue, human placenta tissue  

### Species Specificity:
- **human, mouse**
- **Cited Species:** human, mouse

**Note:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

### 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:** unnecessary for -20°C storage.

### Background Information

ZIP7 is a functional zinc transporter transporting zinc from the Golgi apparatus to the cytoplasm of the cell. ZIP7 is post-translationally regulated by CK2-mediated phosphorylation. This ZIP7 phosphorylation results in zinc release from intracellular stores, which activates multiple tyrosine kinases and regulate cell survival and proliferation. Dual bands of 50 kDa and 56 kDa detected by this antibody may represent the native and phosphorylated forms of ZIP7, respectively. (PMID: 28232492, 28205653)

### Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johanna Ollig</td>
<td>30448146</td>
<td>J Nutr Biochem</td>
<td>WB</td>
</tr>
<tr>
<td>Ying Liu</td>
<td>25969539</td>
<td>J Biol Chem</td>
<td>IF</td>
</tr>
<tr>
<td>Alexandra Grubman</td>
<td>24626841</td>
<td>Metallomics</td>
<td>WB</td>
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For technical support and original validation data for this product please contact:  
**T:** 1(888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 405-8498 (outside USA)  
**E:** proteintech@ptglab.com  
**W:** ptglab.com

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Selected Validation Data

Mouse liver tissue were subjected to SDS-PAGE followed by Western blot with 19429-1-AP (ZIP7 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human kidney using 19429-1-AP (ZIP7 antibody) at dilution of 1:100 (under 10x lens).

Immunohistochemical analysis of paraffin-embedded human kidney using 19429-1-AP (ZIP7 antibody) at dilution of 1:100 (under 40x lens).

IP Result of anti-ZIP7 (IP:19429-1-AP 4ug; Detection:19429-1-AP 1:500) with mouse brain tissue lysate 400ug.