Basic Information

<table>
<thead>
<tr>
<th>Catalog Number:</th>
<th>10736-1-AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenBank Accession Number:</td>
<td>BC007562</td>
</tr>
<tr>
<td>Gene ID (NCBI):</td>
<td>7415</td>
</tr>
<tr>
<td>Source:</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Isotype:</td>
<td>IgG</td>
</tr>
<tr>
<td>Purification Method:</td>
<td>Antigen affinity purification</td>
</tr>
<tr>
<td>Immunogen Catalog Number:</td>
<td>AG1032</td>
</tr>
</tbody>
</table>

Recommended Dilutions:
- WB: 1:1000-1:5000
- IP: 0.5-4.0 μg for IP and 1:100-1:2000 for WB
- IHC: 1:100-1:400
- IF: 1:10-1:100

Applications

Tested Applications:
- IF, IHC, IP, WB, ELISA

Cited Applications:
- CoIP, IF, WB

Species Specificity:
- human, mouse, rat

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

Positive Controls:
- WB: SH-SY5Y cells; HeLa cells, human brain tissue, MCP-7 cells, mouse brain tissue, mouse lung tissue, mouse thymus tissue, rat brain tissue, rat lung tissue
- IP: HeLa cells; mouse brain tissue
- IHC: human gliomas tissue, human colon cancer tissue, human lung cancer tissue
- IF: SH-SY5Y cells

Background Information

VCP (Valosin-containing protein), also known as TER ATPase and 15S Mg2+-ATPase p97 subunit, belongs to the AAA ATPase family. VCP was first identified as a result of attempts to clone a putative peptide hormone called valosin. It was found that the cloned cDNA encoded a ubiquitously expressed 90 kDa cytosolic protein, termed VCP, which showed none of the characteristics of a peptide hormone precursor (PMID: 1382975). Defects in VCP are the cause of inclusion body myopathy with early-onset Paget disease and frontotemporal dementia (IBMPFD) and amyotrophic lateral sclerosis type 14 with or without frontotemporal dementia (ALS14). VCP has a calculated molecular weight of 89 kDa and an apparent molecular weight of 90-100 kDa (PMID: 15732117, 1382975).

Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zhourteng Tao</td>
<td>25575510</td>
<td>Hum Mol Genet</td>
<td>WB</td>
</tr>
<tr>
<td>Yang Zhang</td>
<td>26909724</td>
<td>Acupunct Med</td>
<td>WB</td>
</tr>
<tr>
<td>Rakesh Ganji</td>
<td>26989506</td>
<td>Mol Cell Biol</td>
<td>WB, CoIP, IF</td>
</tr>
</tbody>
</table>

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

For technical support and original validation data for this product please contact:
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 10736-1-AP (VCP antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.

IP Result of anti-VCP (IP: 10736-1-AP, 4ug; Detection: 10736-1-AP 1:1000) with HeLa cells lysate 150ug.

Immunohistochemistry of paraffin-embedded human gliomas tissue slide using 10736-1-AP (VCP Antibody) at dilution of 1:200 (under 10x lens).

Immunohistochemistry of paraffin-embedded human gliomas tissue slide using 10736-1-AP (VCP Antibody) at dilution of 1:200 (under 40x lens).

Immunofluorescent analysis of SH-SY5Y cells using 10736-1-AP (VCP antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated Anti-Rabbit Goat Anti-Rabbit IgG at dilution of 1:50.