XBP1S-specific Polyclonal antibody

Catalog Number: 24868-1-AP

Basic Information

Catalog Number: 24868-1-AP
Size: 150μl, Concentration: 600μg/ml by Nanodrop
Source: Rabbit
Isotype: IgG
Immunogen Catalog Number: AG21703

GenBank Accession Number: BC000938
GeneID (NCBI): 7494
Full Name: X-box binding protein 1
Calculated MW: 261 aa, 29 kDa
Observed MW: 55-65 kDa

Purification Method: Antigen affinity purification
Recommended Dilutions:
WB: 1:1000-1:6000
IHC: 1:50-1:500

Applications

Tested Applications: FC, IHC, WB, ELISA
Cited Applications: IF, IHC, WB
Species Specificity: human, mouse, rat
Cited Species: human, rat, mouse

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: HEK-293T cells, MCF-7 cells, mouse liver tissue, rat liver tissue
IHC: human breast cancer tissue, human colon cancer tissue, human liver cancer tissue, mouse liver tissue

Background Information

XBP1, also named as XBP2, belongs to the bZIP family. The X-box-binding protein-1 (XBP1) is a transcriptional regulator of the ER stress response that lies downstream of inositol-requiring enzyme 1 (IRE1α) activation (PMID: 14559994). XBP1 localizes in the nucleus. As a transcription factor, it is essential for hepatocyte growth, the differentiation of plasma cells, the immunoglobulin secretion, and the unfolded protein response. XBP1 has an association with major affective disorder. The unspliced XBP1U isoform is composed of 261 amino acid residues, and the spliced XBP1S isoform is composed of 376 amino acid residues. The calculated molecular weight of protein generated from the unspliced XBP1U isoform XBP1U mRNA is 33 kDa, and protein generated from spliced XBP1 isoform XBP1S mRNA is 54 kDa. This antibody specially recognizes the XBP1S isoform.

Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guoqing Jing</td>
<td>36171629</td>
<td>J Neuroinflammation</td>
<td>WB</td>
</tr>
<tr>
<td>Jing Sun</td>
<td>34659437</td>
<td>Front Pharmacol</td>
<td>WB</td>
</tr>
<tr>
<td>Yu Chen</td>
<td>34592660</td>
<td>Cell Calcium</td>
<td>WB</td>
</tr>
</tbody>
</table>

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 is unnecessary for -20°C storage

*** 20μl sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) | E: proteintechn@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Selected Validation Data

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 24868-1-AP (XBP1S antibody at dilution of 1:200 (under 60x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human XBP1S-specific (24868-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 90% MeOH and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).

mouse liver tissue were subjected to SDS PAGE followed by western blot with 24868-1-AP (XBP1S-specific antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.

Various lysates were subjected to SDS PAGE followed by western blot with 24868-1-AP (XBP1S-specific antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.

Various lysates were subjected to SDS PAGE followed by western blot with 24868-1-AP (XBP1S-specific antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.