**Product datasheet**

**Anti-ERp29 antibody ab11420**

★★★★★ 4 Abreviews   15 References   7 Images

**Overview**

**Product name**  
Anti-ERp29 antibody

**Description**  
Rabbit polyclonal to ERp29

**Host species**  
Rabbit

**Tested applications**  
Suitable for: Flow Cyt, IHC-Fr, ICC, WB, IP, ICC/IF

**Species reactivity**  
Reacts with: Mouse, Rat, Guinea pig, Hamster, Cow, Dog, Human, Non human primates

**Immunogen**  
Recombinant full length protein (His-tag) corresponding to Rat ERp29.

**Positive control**  

**Properties**

**Form**  
Liquid

**Storage instructions**  
Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

**Storage buffer**  
Preservative: 0.02% Sodium azide

**Purity**  
Whole antiserum

**Clonality**  
Polyclonal

**Isotype**  
IgG

**Applications**

Our Abpromise guarantee covers the use of ab11420 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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</table>
| Flow Cyt    | 1/500. PubMed: 17451556  
ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody. |

| IHC-Fr | ★★★★★ | Use at an assay dependent concentration. PubMed: 17652758 |
Proper protein folding and post-translational modifications are essential for secretory protein export out of the endoplasmic reticulum. This task is accomplished by chaperone proteins such as protein disulfide isomerase (PDI), GRP94, and BiP. A recently characterized protein, designated ERp29, is closely related to these chaperone proteins and appears to be upregulated during ER stress conditions. ERp29 is a soluble 259-residue protein that is localized to the lumen of the endoplasmic reticulum in all mammalian cells. Research has shown that there are two primary domains within ERp29. The first is the C-terminal region that is a novel, all helical, fold that is most likely involved with ERp29 retention to the ER. The second is the N-terminal region that resembles that of PDI's thioredoxin module. The protein shows sequence similarity to the protein disulfide isomerase family. However, it lacks the thioredoxin motif characteristic of this family, suggesting that this protein does not function as a disulfide isomerase. The protein dimerizes and is thought to play a role in the processing of secretory proteins within the ER.

**Cellular localization**
Endoplasmic reticulum, Cell surface.

<table>
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<tbody>
<tr>
<td>ICC</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
<tr>
<td>WB</td>
<td>★★★★★</td>
<td>1/2500. Detects a band of approximately 29 kDa (predicted molecular weight: 29 kDa). This antibody detects an 29 kDa protein representing ERp29 in rat liver homogenate.</td>
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<tr>
<td>IP</td>
<td>1/500.</td>
<td></td>
</tr>
<tr>
<td>ICC/IF</td>
<td>1/500,</td>
<td>Immunofluorescence data demonstrates that ERp29 is localized to the ER of rat thyrocytes using ab11420.</td>
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</table>

**Images**

All lanes: Anti-ERp29 antibody (ab11420) at 1 µg/ml

Lane 1: MDCK (canine kidney cell line) membrane-enriched extract
Lane 2: NIH/3T3 (mouse embryo fibroblast cell line) membrane-enriched extract
Lane 3: HepG2 (human liver hepatocellular carcinoma cell line) membrane-enriched extract
Lane 4: A549 (human lung carcinoma cell line) membrane-enriched extract
Lane 5: MCF7 (human breast adenocarcinoma cell line) membrane-enriched extract
Lane 6: A431 (human epidermoid carcinoma cell line) membrane-enriched extract
Lane 7: HEK-293 (human epithelial cell line from embryonic kidney) membrane-enriched extract

Lysates/proteins at 30 µg per lane.

Developed using the ECL technique.

Predicted band size: 29 kDa

12% SDS-PAGE

Western blot of ERp29 in HEK cell lysate using ab11420.

Immunocytochemistry/Immunofluorescence - Anti-ERp29 antibody (ab11420)

 ICC/IF image of ab11420 stained HepG2 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab11420, 1/1000 dilution) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.
Immunocytochemistry/Immunofluorescence analysis of HMVEC cells labeling ERp29 with ab11420.

Immunocytochemistry/Immunofluorescence analysis of NS-1 cells labeling ERp29 with ab11420.
Immunocytochemistry/Immunofluorescence analysis of p19 cells labeling ERp29 with ab11420.

Immunocytochemistry/Immunofluorescence analysis of rat thyrocytes labeling ERp29 with ab11420.

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