Anti-Hsp70/HSPA1A/HSPA1B Antibody

Catalog Number: PA1813

About HSPA1A

HSPA1(heat shock 70kDa protein 1A) also known as HSP70-1, HSPA1A, HSP70-1A, HSP72 or HSP70I, is a protein that in humans is encoded by the HSPA1A gene. This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. The HSPA1A gene encodes a predicted 641-amino acid protein. The HSPA1 gene is mapped on 6p21.33. Shimizu et al.(1999) found that peripheral blood mononuclear cells of 18 major depression patients expressed a short HSPA1A transcript that utilized exon 1 rather than exon 2, which is found in the more common HSPA1A transcript. No protein was associated with expression of this short HSPA1A mRNA, possibly due to lack of a TATA box or loss of internal ribosome binding sites. Treatment with BGP-15, a pharmacologic inducer of Hsp72 that can protect against obesity-induced insulin resistance, improved muscular architecture, strength, and contractile function in severely affected diaphragm muscles in mdx dystrophic mice.

Overview

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Anti-Hsp70/HSPA1A/HSPA1B Antibody</th>
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</thead>
<tbody>
<tr>
<td>Reactive Species</td>
<td>Human, Rat</td>
</tr>
<tr>
<td>Description</td>
<td>Rabbit IgG polyclonal antibody for Heat shock 70 kDa protein 1A/1B(HSPA1A/HSPA1B) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Rat.</td>
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<tr>
<td>Conjugate</td>
<td>No</td>
</tr>
<tr>
<td>Application</td>
<td>IHC, ICC, WB</td>
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<tr>
<td>Clonality</td>
<td>Polyclonal</td>
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<tr>
<td>Formulation</td>
<td>Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.</td>
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<tr>
<td>Storage Instructions</td>
<td>At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.</td>
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<tr>
<td>Host</td>
<td>Rabbit</td>
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<tr>
<td>Uniprot ID</td>
<td>P0DMV8</td>
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</tbody>
</table>

Technical Details

| Immunogen | A synthetic peptide corresponding to a sequence at the C-terminus of human Hsp70(577-596aa VISWLDANTLAEKDEFEHKR), different from the related mouse sequence by four amino acids and from the related rat sequence by three amino acids. |
### Predicted Reactive Species
- Chicken

### Recommended Detection Systems
- Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) and ICC.

### Cross Reactivity
- No cross reactivity with other proteins

### Isotype
- N/A

### Form
- Lyophilized

### Concentration
- Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

### Purification
- Immunogen affinity purified.

### Suggested Dilutions
- Immunohistochemistry(Paraffin-embedded Section), 0.5-1μg/ml, Human, By Heat
- Immunocytochemistry, 0.5-1μg/ml, Human, -
- Immunohistochemistry(Frozen Section), 0.5-1μg/ml, Rat, Human
- Western blot, 0.1-0.5μg/ml, Human

For protocols please visit https://www.bosterbio.com/protocol-and-troubleshooting/

### Anti-Hsp70/HSPA1A/HSPA1B Antibody (PA1813) Images

**Anti-Hsp70 antibody, PA1813, Western blotting**
- All lanes: Anti Hsp70 (PA1813) at 0.5μg/ml
- Lane 1: 293T Whole Cell Lysate at 40ug
- Lane 2: HELA Whole Cell Lysate at 40ug
- Lane 3: A549 Whole Cell Lysate at 40ug
- Lane 4: A431 Whole Cell Lysate at 40ug
- Lane 5: PANC Whole Cell Lysate at 40ug
- Predicted bind size: 70KD
- Observed bind size: 70KD

**Anti-Hsp70 antibody, PA1813, IHC(P)**
- IHC(P): Human Intestinal Cancer Tissue
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