

Anti-Hsc70 Antibody
Catalog # ABO10595

Specification

Anti-Hsc70 Antibody - Product Information

Application	WB, IHC, ICC
Primary Accession	E9PSH5
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Heat shock cognate 71 kDa protein(HSPA8) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.

Reconstitution

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

Anti-Hsc70 Antibody - Additional Information

Application Details

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

Protein Name

Heat shock cognate 71 kDa protein

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Hsc70(13-31aa TTYSCVGVFQHGKVEIIAN), identical to the related rat and mouse sequence.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

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.

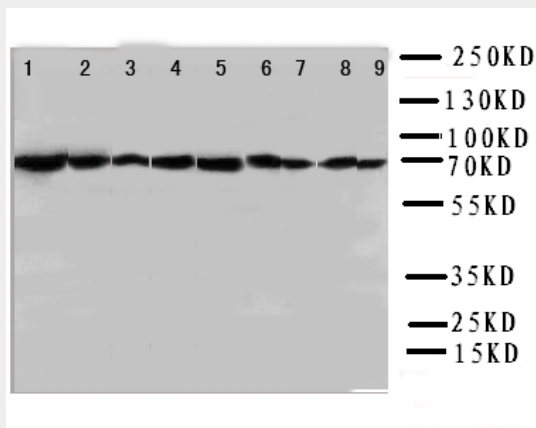
Anti-Hsc70 Antibody - Protein Information

Anti-Hsc70 Antibody - Protocols

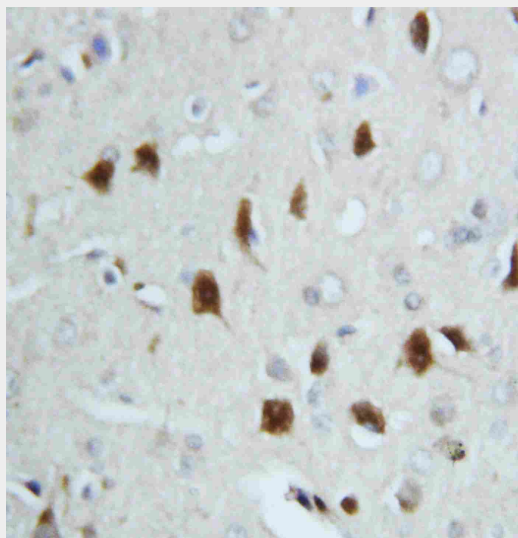
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

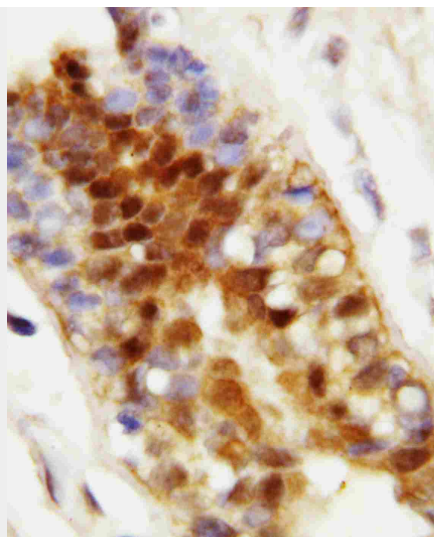
Anti-Hsc70 Antibody - Images



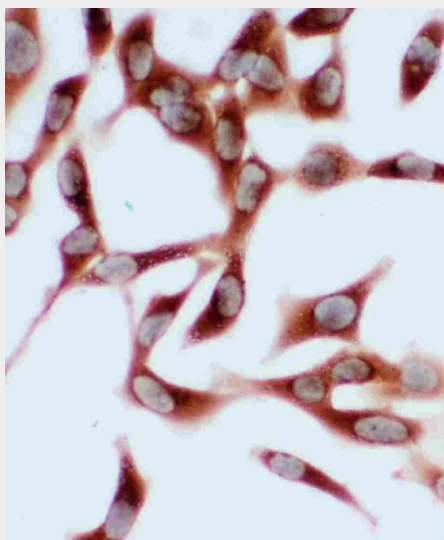
Anti-Hsc70 antibody, ABO10595, Western blotting
Lane 1: Rat Testis Tissue Lysate
Lane 2: Rat Brain Tissue Lysate
Lane 3: Rat Liver Tissue Lysate
Lane 4: Rat Lung Tissue Lysate
Lane 5: CEM Cell Lysate
Lane 6: HELA Cell Lysate
Lane 7: SMMC Cell Lysate
Lane 8: HT1080 Cell Lysate
Lane 9: COLO320 Cell Lysate



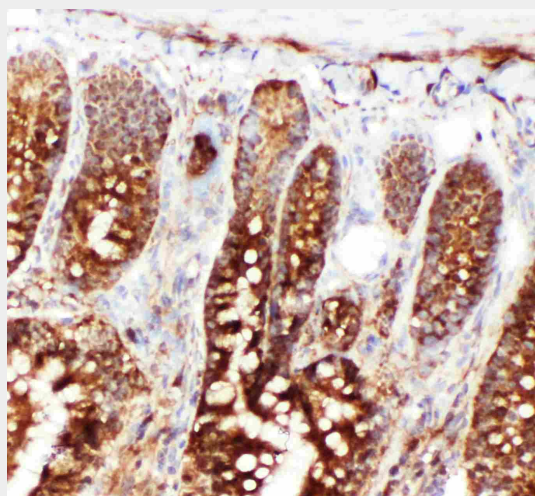
Anti-Hsc70 antibody, ABO10595, IHC(P)IHC(P): Rat Brain Tissue



Anti-Hsc70 antibody, ABO10595, IHC(P)IHC(P): Human Mammary Cancer Tissue



Anti-Hsc70 antibody, ABO10595, ICCICC: HELA Cell



Anti-Hsc70 antibody, ABO10595, IHC(F)IHC(F): Rat Intestine Tissue

Anti-Hsc70 Antibody - Background

The 70 kilodalton heat shock proteins(Hsp70s) are a family of ubiquitously expressed heat shock proteins. The Hsp70s are an important part of the cell's machinery for protein folding, and help to protect cells from stress. All of the Hsp70 proteins have three major functional domains: An N-terminal ATPase domain binds ATP(Adenosine triphosphate) and hydrolyzes it to ADP(Adenosine diphosphate); A substrate binding domain contains a groove with an affinity for neutral, hydrophobic amino acid residues; A C-terminal domain rich in alpha helical structure acts as a 'lid' for the substrate binding domain. By binding tightly to partially-synthesized peptide sequences(incomplete proteins), Hsp70 prevents them from aggregating and being rendered nonfunctional. And it also can act to protect cells from thermal or oxidative stress. Finally, Hsp70 seems to be able to participate in disposal of damaged or defective proteins. Interaction with CHIP(Carboxyl-terminus of Hsp70 Interacting Protein)â€”an E3 ubiquitin ligaseâ€”allows Hsp70 to pass proteins to the cell's ubiquitination and proteolysis pathways.