

## HSP70 (3G10) Mouse mAb

CatalogNo: YM3042 **Orthogonal Validated** 

### Key Features

#### Host Species

- Mouse

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IHC, IF

#### MW

- 70kD (Observed)

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** PBS, pH 7.4, containing 0.5% BSA, 0.02% sodium azide as Preservative and 50% Glycerol.

### Recommended Dilution Ratios

WB 1:1000-2000

IF 1:100-200

IHC 1:50-300

### Basic Information

**Clonality** Monoclonal

**Clone Number** 3G10

### Immunogen Information

**Immunogen** Human protein HSP70 at C-terminal

**Specificity** The antibody detects endogenous HSP70 proteins.

## Target Information

**Gene name** HSPA1A;HSPA1B

**Protein Name** Heat shock 70 kDa protein 1A/1B

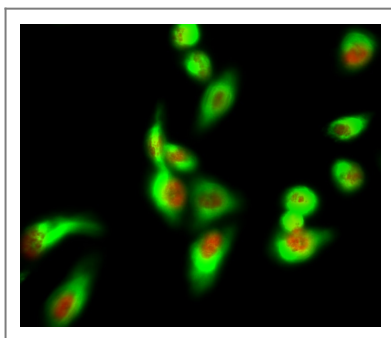
Organism	Gene ID	UniProt ID
Human	<a href="#">3303</a> ; <a href="#">3304</a> ;	<a href="#">P0DMV8</a> ; <a href="#">P0DMV9</a> ;

**Cellular Localization** Cytoplasm . Nucleus . Cytoplasm , cytoskeleton , microtubule organizing center , centrosome . Secreted . Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

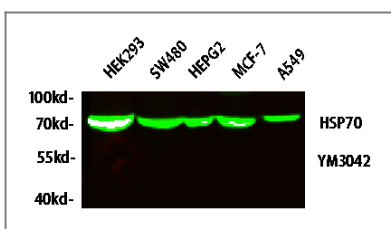
**Tissue specificity** Brain ,Cajal-Retzius cell ,Embryonic kidney ,Epithelium ,Fetal

**Function** Function:In cooperation with other chaperones , Hsp70s stabilize preexistent proteins against aggregation and mediate the folding of newly translated polypeptides in the cytosol as well as within organelles. These chaperones participate in all these processes through their ability to recognize nonnative conformations of other proteins. They bind extended peptide segments with a net hydrophobic character exposed by polypeptides during translation and membrane translocation , or following stress-induced damage. In case of rotavirus A infection , serves as a post-attachment receptor for the virus to facilitate entry into the cell. ,induction:By heat shock. ,similarity:Belongs to the heat shock protein 70 family. ,subunit:HSPA1B is found in a sperm-specific complex with CATSPER1 and CATSPERB (By similarity) . Interacts with TSC2. Interacts with IRAK1BP1. ,tissue specificity:HSPA1B is testis-specific. ,

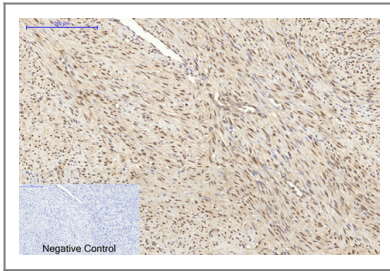
## Validation Data



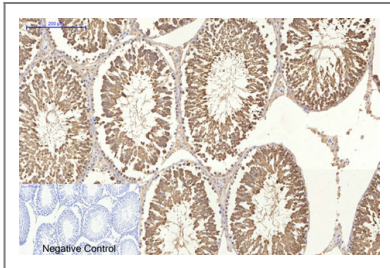
Immunofluorescence analysis of HeLa cell. 1,Rabbit  $\beta$ -Tubulin Antibody YM8335 (green) was diluted at 1:200 (4°C overnight). HSP70 (3G10) Mouse mAb (red) was diluted at 1:200 (4°C overnight).2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog:RS3608 was diluted at 1:1000 (room temperature, 50min).



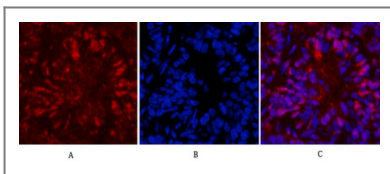
Western blot analysis of lysates from HT-29, NIH/3T3, and HepG2 cells, primary antibody was diluted at 1:1000, 4°C over night, secondary antibody (cat: RS23910)was diluted at 1:10000, 37° 1hour.



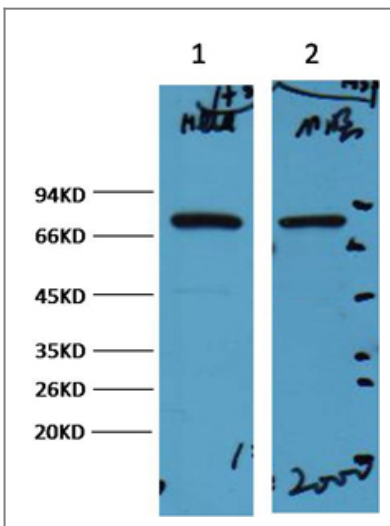
Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,HSP70 Monoclonal Antibody (3G10) was diluted at 1:200 (4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min). 3,Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



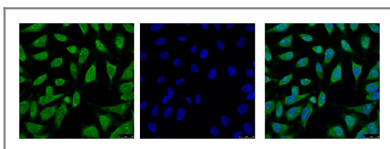
Immunohistochemical analysis of paraffin-embedded Rat-testis tissue. 1,HSP70 Monoclonal Antibody (3G10) was diluted at 1:200 (4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min). 3,Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Mouse-lung tissue. 1,HSP70 Monoclonal Antibody (3G10) (red) was diluted at 1:200 (4°C overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min).3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of 1) HeLa, 2) Mouse Brain, diluted at 1:2000.



IF analysis of HeLa with antibody (Left) and DAPI (Right) diluted at 1:100.

## Contact information

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Please scan the QR code to access additional product information:  
**HSP70 (3G10)**  
**Mouse mAb**

