For Research Use Only

HSPA2 Polyclonal antibody

Catalog Number:12797-1-AP Featured Product 12 Publications

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Basic Information

Catalog Number:
12797-1-AP

Size:
700 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG3539

GenBank Accession Number:
BC036107

GeneID (NCBI):
3306

UNIPROT ID:
P54652

Full Name:
heat shock 70kDa protein 2

Calculated MW:
639 aa, 70 kDa

Observed MW:
70 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:2000-1:5000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:200-1:1600
IF/ICC 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP

Species Specificity:
human, mouse, rat

Cited Species:
human, 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 : A431 cells, human brain tissue, human kidney tissue, human skeletal muscle tissue, HeLa cells, Jurkat cells, MCF-7 cells, NIH/3T3 cells, C6 cells, mouse skeletal tissue

IP : mouse skeletal muscle tissue,

IHC : human normal colon, human ovary tumor tissue, human prostate hyperplasia tissue, human testis tissue, mouse ovary tissue

IF/ICC : HeLa cells,

Background Information

Human HSPA2 is a member of the HSPA (HSP70) family of heat-shock proteins, encoded by the gene originally described as testis-specific. Recently, it has been reported that HSPA2 can be also expressed in human somatic tissues in a cell-type specific manner. HSPA2 is a cytosol/nuclear protein able to translocate between cytoplasm and nucleus. At physiological temperature, the HSPA2 was localized primarily in cytoplasm whereas, during heat shock, localization shifted to nucleus and nucleoli (PMID: 18452162). HSPA2 is involved in sperm maturity, function and fertility. Aberrant expression of HSPA2 in testes has been connected with male infertility. Recently, HSPA2 has attracted increased interest due to its possible involvement in carcinogenesis of non-testicular tissues. This antibody well recognized the endogenous HSPA2 protein in testis and multiple cell lines. (21373891)

Notable Publications

Author	Pubmed ID	Journal	Application
Jianjun Hu	29161344	Biol Reprod	IF
Liuze Gao	33177084	Sci Adv	IF
Long Jiang	28502657	Curr Biol	WB

Storage

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

For technical support and original validation data for this product please contact:
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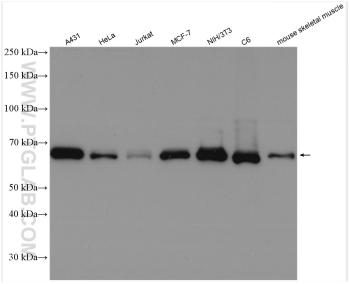
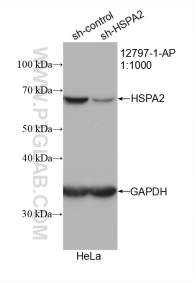
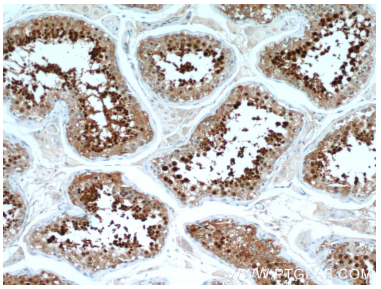
Selected Validation Data



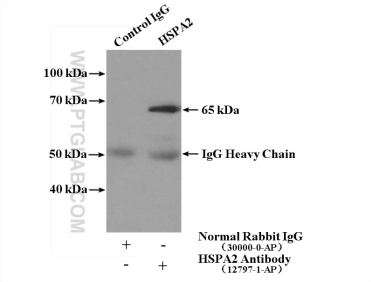
Various lysates were subjected to SDS PAGE followed by western blot with 12797-1-AP (HSPA2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



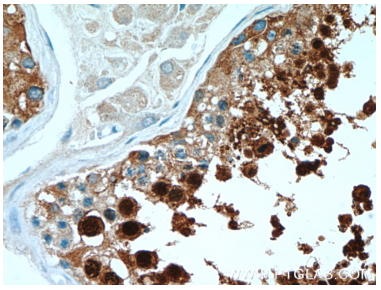
WB result of HSPA2 antibody (12797-1-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-HSPA2 transfected HeLa cells.



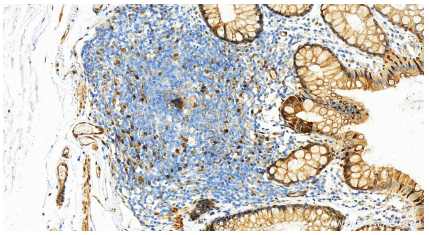
Immunohistochemical analysis of paraffin-embedded human testis using 12797-1-AP (HSPA2 antibody) at dilution of 1:50 (under 10x lens).



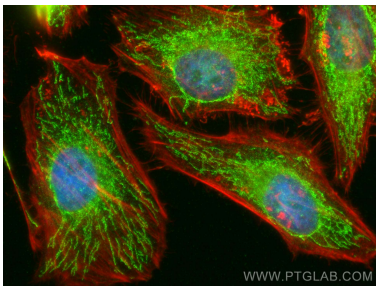
IP result of anti-HSPA2 (IP:12797-1-AP, 4ug; Detection:12797-1-AP 1:1000) with mouse skeletal muscle tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded human testis using 12797-1-AP (HSPA2 antibody) at dilution of 1:50 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded human normal colon slide using 12797-1-AP (HSPA2 antibody) at dilution of 1:1600 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using HSPA2 antibody (12797-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).