

For Research Use Only

HSF4 Polyclonal antibody

Catalog Number: 22883-1-AP

1 Publications



Basic Information

Catalog Number:

22883-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop and 380 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG18935

GenBank Accession Number:

BC153061

GeneID (NCBI):

3299

UNIPROT ID:

Q9ULV5

Full Name:

heat shock transcription factor 4

Calculated MW:

492 aa, 53 kDa

Observed MW:

62-66 kDa

Purification Method:

Antigen Affinity purified

Recommended Dilutions:

WB: 1:1000-1:4000

IHC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB

Species Specificity:

human, mouse, rat

Cited Species:

human

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: HeLa cells, human brain tissue, mouse brain tissue, mouse lung tissue, rat brain tissue, mouse heart tissue, mouse skeletal muscle tissue

IHC: mouse brain tissue,

Background Information

Prokaryotic and eukaryotic cells respond to thermal and chemical stress by inducing a group of genes collectively designated heat shock genes. In eukaryotes, this gene expression is regulated primarily at the transcription level. Heat shock transcription factors (HSF, also designated HSTF) 1 and 2 are involved in this regulation. HSF1 and HSF2 are upregulated by estrogen, at both the mRNA and protein level. HSF1 is normally found as a monomer, whose transcriptional activity is repressed by constitutive phosphorylation. Upon activation, HSF1 forms trimers, gains DNA binding activity and is translocated to the nucleus. HSF2 activity is associated with differentiation and development, and, like HSF1, binds DNA as a trimer. HSF4 exists as two splice variants and is expressed in heart, brain and skeletal muscle as a homotrimer. HSF4a does not contain a DNA-binding domain and inhibits the formation of HSF1 nuclear bodies, thus repressing HSF1 mediated transcription. HSF4b does contain a DNA-binding domain and colocalizes with HSF1 nuclear bodies after heat shock. This antibody is specific to human HSF4.

Notable Publications

Author	Pubmed ID	Journal	Application
Baixue Liu	40023307	Exp Eye Res	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

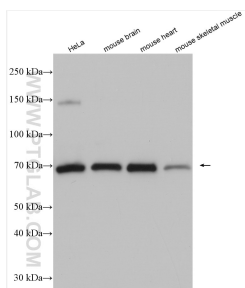
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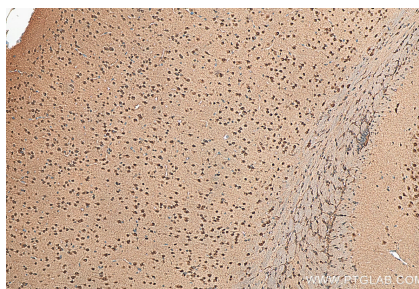
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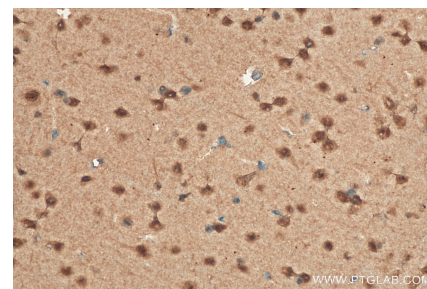
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 22883-1-AP (HSF4 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 22883-1-AP (HSF4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 22883-1-AP (HSF4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).