For Research Use Only

HSF4 Polyclonal antibody

Catalog Number: 22883-1-AP



Purification Method:

WB 1:1000-1:4000

Antigen Affinity purified

Recommended Dilutions:

Basic Information

Applications

Catalog Number: GenBank Accession Number: 22883-1-AP BC153061

 Size:
 GeneID (NCBI):

 600 μ g/ml
 3299

Source: UNIPROT ID:
Rabbit Q9ULV5

IgG heat shock transcription factor 4

Immunogen Catalog Number: Calculated MW: AG18935 492 aa, 53 kDa

5 492 aa, 53 kDa Observed MW: 62-66 kDa

Tested Applications: Positive Controls:

Full Name:

WB, ELISA

WB: HeLa cells, human brain tissue, mouse brain

Species Specificity: tissue, mouse lung tissue, rat brain tissue, mouse heart

human, mouse, rat tissue, mouse skeletal muscle 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 transcriptionlevel. 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.

Storage

Storage:

Isotype:

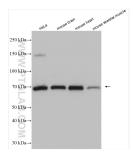
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 2283-1-AP (HSF4 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.