

Anti-Heat shock factor protein 2 HSF2 Antibody Picoband®

Catalog Number: PA1607

About HSF2

HSF2 (HEAT-SHOCK TRANSCRIPTION FACTOR 2), also called HEAT-SHOCK FACTOR 2, as well as the related gene HSF1, encodes a protein that binds specifically to the heat-shock element and has homology to HSFs of other species. The International Radiation Hybrid Mapping Consortium maps the HSF2 gene to chromosome 6. Mouse Hsf2 was expressed in all 3 embryonic layers at embryonic day 7.5 and that the head fold was strongly stained at embryonic day 8.5. In adults, Hsf2 expression is detected in spermatocytes and spermatogonia, but not in elongated spermatids, spermatozoa, or Sertoli cells. Hsp70i bookmarking is mediated by a transcription factor called HSF2, which binds this promoter in mitotic cells, recruits protein phosphatase-2A, and interacts with the CAPG subunit of the condensin enzyme to promote efficient dephosphorylation and inactivation of condensin complexes in the vicinity, thereby preventing compaction at this site. And Hsf2-null mice were born at the expected mendelian ratio but had brain abnormalities and meiotic and gametogenic defects in both genders.

Overview

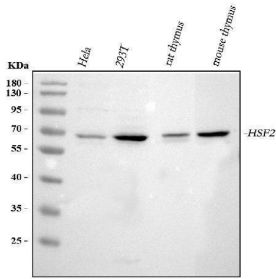
Product Name	Anti-Heat shock factor protein 2 HSF2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Heat shock factor protein 2 HSF2 Antibody catalog # PA1607. Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.01mg NaN ₃ . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q03933

Technical Details

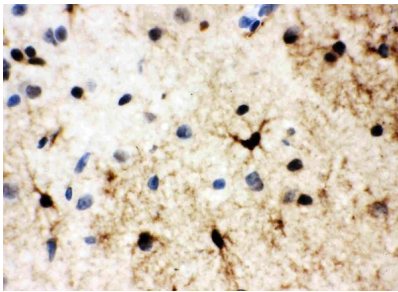
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human HSF2, identical to the related mouse sequence, and different from the related rat sequence by one amino acid.
-----------	---

Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Rat Immunocytochemistry/Immunofluorescence, 2ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10 ⁶ cells, Human

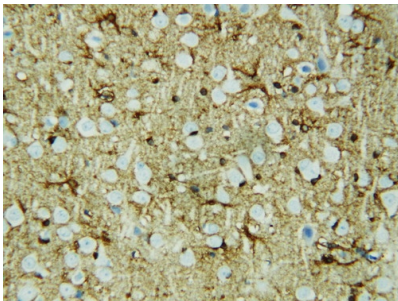
Anti-Heat shock factor protein 2 HSF2 Antibody Picoband® (PA1607) Images



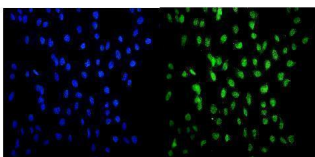
Western blot analysis of HSF2 using anti-HSF2 antibody (PA1607). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: rat thymus tissue lysates, Lane 4: mouse thymus tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HSF2 antigen affinity purified polyclonal antibody (Catalog # PA1607) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for HSF2 at approximately 60 kDa. The expected band size for HSF2 is at 60 kDa.



Anti-HSF2 antibody, PA1607, IHC(P)IHC(P): Rat Brain Tissue

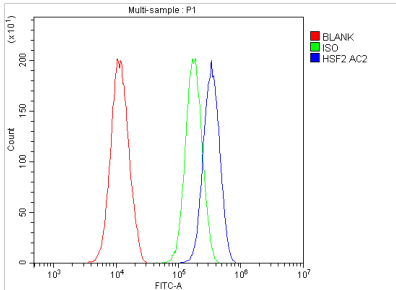


Anti-HSF2 antibody, PA1607, IHC(P)IHC(P): Rat Brain Tissue



IF analysis of HSF2 using anti-HSF2 antibody (PA1607). HSF2 was detected in immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-HSF2 Antibody (PA1607) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence

microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of 293T cells using anti-HSF2 antibody (PA1607). Overlay histogram showing 293T cells stained with PA1607 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HSF2 Antibody (PA1607, 1 μ g/1x10⁶ cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Heat shock factor protein 2 HSF2 Antibody

For Research Use Only. Not for use in diagnostic procedures.