

Anti-HSF4 Picoband Antibody

Catalog # ABO12320

Specification

Anti-HSF4 Picoband Antibody - Product Information

Application	WB
Primary Accession	<u>Q9ULV5</u>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	
Rabbit IgG polyclonal antibody for Heat shock factor protein 4(HSF4) detection. Tested with WB in	
Human.	

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-HSF4 Picoband Antibody - Additional Information

Gene ID 3299

Other Names Heat shock factor protein 4, HSF 4, hHSF4, Heat shock transcription factor 4, HSTF 4, HSF4

Calculated MW 53011 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human

Subcellular Localization Nucleus.

Tissue Specificity Expressed in heart, skeletal muscle, eye and brain, and at much lower levels in some other tissues. .

Protein Name Heat shock factor protein 4

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human HSF4 (149-185aa VQESTEARLRELRQQNEILWREVVTLRQSHGQQHRVI), different from the related mouse sequence by two amino acids.



Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-HSF4 Picoband Antibody - Protein Information

Name HSF4

Function

Heat-shock transcription factor that specifically binds heat shock promoter elements (HSE) (PubMed:22587838, PubMed:23507146). Required for denucleation and organelle rupture and degradation that occur during eye lens terminal differentiation, when fiber cells that compose the lens degrade all membrane-bound organelles in order to provide lens with transparency to allow the passage of light (By similarity). In this process, may regulate denucleation of lens fiber cells in part by activating DNASE2B transcription (By similarity). May be involved in DNA repair through the transcriptional regulation of RAD51 (PubMed:<a href="http://www.uniprot.org/citations/22587838"" target="_blank" = "fiber cells" the transcriptional regulation of the tr

target="_blank">22587838). May up-regulate p53/TP53 protein in eye lens fiber cells, possibly through protein stabilization (PubMed:28981088). In the eye lens, controls the expression of alpha-crystallin B chain/CRYAB and consequently may be involved in the regulation of lysosomal acidification (By similarity).

Cellular Location Nucleus.

Tissue Location Expressed in heart, skeletal muscle, eye and brain, and at much lower levels in some other tissues

Anti-HSF4 Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-HSF4 Picoband Antibody - Images



1 2 130KD – 100KD – 70KD – 55KD – – – 35KD – 25KD – 15KD –

Anti- HSF4 Picoband antibody, ABO12320, Western blottingAll lanes: Anti HSF4 (ABO12320) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 53KDObserved bind size: 53KD

Anti-HSF4 Picoband Antibody - Background

Heat shock factor protein 4 is a protein that in humans is encoded by the HSF4 gene. It is mapped to 16q21. Heat-shock transcription factors (HSFs) activate heat-shock response genes under conditions of heat or other stresses. HSF4 lacks the carboxyl-terminal hydrophobic repeat which is shared among all vertebrate HSFs and has been suggested to be involved in the negative regulation of DNA binding activity. Two alternatively spliced transcripts encoding distinct isoforms and possessing different transcriptional activity have been described.