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HSF4 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16038a

Specification

HSF4 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q9ULV5
Other Accession	Q9R0L1, NP_001529.2, NP_001035757.1
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**53011**
Antigen Region	**100-128**

HSF4 Antibody (N-term) - Additional Information

Gene ID 3299

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

Target/Specificity
This HSF4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 100-128 amino acids from the N-terminal region of human HSF4.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
HSF4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HSF4 Antibody (N-term) - 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: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.

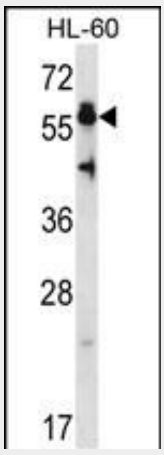
Tissue Location
Expressed in heart, skeletal muscle, eye and brain, and at much lower levels in some other tissues

HSF4 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HSF4 Antibody (N-term) - Images



HSF4 Antibody (N-term) (Cat. #AP16038a) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the HSF4 antibody detected the HSF4 protein (arrow).

HSF4 Antibody (N-term) - Background

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.

HSF4 Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Enoki, Y., et al. Biochim. Biophys. Acta 1802(9):749-753(2010)
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Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
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