

HSF4 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1700a

Product Information

Application	WB, FC, E
Primary Accession	Q9ULV5
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2E7
Isotype	IgG1
Calculated MW	53011
Description	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.
Immunogen	Purified recombinant fragment of human HSF4 expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	3299
Other Names	Heat shock factor protein 4, HSF 4, hHSF4, Heat shock transcription factor 4, HSTF 4, HSF4
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HSF4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

References

Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi. 2010 Apr;26(4):325-8. Am J Hum Genet. 2009 Nov;85(5):628-42.

Images

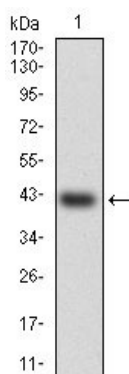


Figure 1: Western blot analysis using HSF4 mAb against human HSF4 (AA: 245-411) recombinant protein. (Expected MW is 42.9 kDa)

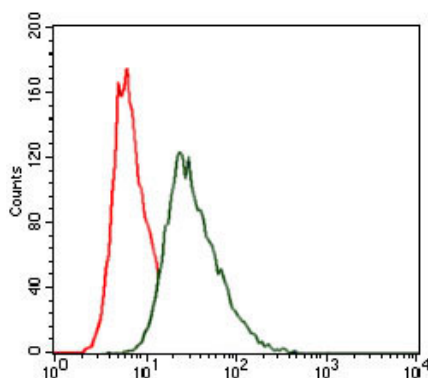


Figure 2: Flow cytometric analysis of HeLa cells using HSF4 mouse mAb (green) and negative control (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.