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Rabbit Anti-HSF4 antibody

SL16557R

Product Name:	HSF4
Chinese Name:	热休克因子蛋白4抗体
Alias:	Cataract, Marner; CTM; Heat shock factor protein 4; Heat shock transcription factor 4; hHSF4; HSF 4; HSF4; HSF4_HUMAN; HSTF 4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	53kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HSF4:21-120/492
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. [provided by RefSeq, Jul 2008]

Function:
DNA-binding protein that specifically binds heat shock promoter elements (HSE). Isoform HSF4A represses transcription while the isoform HSF4B activates transcription.

Subcellular Location:
Nucleus.

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

Post-translational modifications:
Phosphorylated mainly on serine residues. Phosphorylation on Ser-298 promotes sumoylation on Lys-293.
Isoform HSF4B is constitutively sumoylated. Sumoylation represses the transcriptional activity and is promoted by phosphorylation on Ser-298. HSFA is not sumoylated.

DISEASE:
Defects in HSF4 are the cause of cataract zonular HSF4-related (CZ-HSF4) [MIM:116800]. A form of zonular cataract. Zonular or lamellar cataracts are opacities, broad or narrow, usually consisting of powdery white dots affecting only certain layers or zones between the cortex and nucleus of an otherwise clear lens. The opacity may be so dense as to render the entire central region of the lens completely opaque, or so translucent that vision is hardly if at all impeded. Zonular cataracts generally do not involve the embryonic nucleus, though sometimes they involve the fetal nucleus. Usually sharply separated from a clear cortex outside them, they may have projections from their outer edges known as riders or spokes. Defects in HSF4 are the cause of cataract Marner type (CAM) [MIM:116800]. A form of cataract with variable and progressive opacities. Affected individuals present with zonular cataract, although some have nuclear, anterior polar, or stellate cataract. Finger malformation is observed in some kindreds.

Similarity:
Belongs to the HSF family.

SWISS:
Q9ULV5

Gene ID:
3299

Database links:

Entrez Gene: 3299 Human

	Omim: 602438 Human SwissProt: Q9ULV5 Human Unigene: 512156 Human Unigene: 710714 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.