

HSF4 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP16038a

Specification

HSF4 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

Q9ULV5

HSF4 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3299

Other Names

Heat shock factor protein 4, HSF 4, hHSF4, Heat shock transcription factor 4, HSF 4, HSF4

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

HSF4 Antibody (N-term) Blocking Peptide - 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"

 $target="_blank">22587838). May up-regulate p53/TP53 protein in eye lens fiber cells, possibly through protein stabilization (PubMed:<a$

href="http://www.uniprot.org/citations/28981088" target="_blank">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) Blocking Peptide - Protocols

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

Blocking Peptides

HSF4 Antibody (N-term) Blocking Peptide - Images

HSF4 Antibody (N-term) Blocking Peptide - Background

Heat-shock transcription factors (HSFs) activateheat-shock response genes under conditions of heat or otherstresses. HSF4 lacks the carboxyl-terminal hydrophobic repeat whichis shared among all vertebrate HSFs and has been suggested to beinvolved in the negative regulation of DNA binding activity. Twoalternatively spliced transcripts encoding distinct isoforms and possessing different transcriptional activity have been described.

HSF4 Antibody (N-term) Blocking Peptide - 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)Ma, Z.Y., et al. Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi 26(4):325-328(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Sajjad, N., et al. BMC Med. Genet. 9, 99 (2008):