9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

HSF1 Human

Heat Shock Transcription Factor-1 Human Recombinant
RCP1064

Product Overview

Name	HSF1 Human
Description	
Heat Shock Transcription Factor-1 Human Recombinant	
Accession (Primary)	Q00613
Synonyms	
HSF-1, HSF1, HSTF-1, HSTF1, Heat shock factor protein 1, Heat shock transcription factor 1.	
Introduction	
The transcription of heat-shock genes is rapidly induced after temperature stress in response to environmental changes, and it is also involved in oogenesis, spermatogenesis, and placental development. Hsp90, is a major repressor of HSF1 gene. HSF1 is known for its participation in heat shock response. HSF1 protein regulates the transcription of hundreds of targets, such as genes involved in protein folding, detoxification, energy generation, carbohydrate metabolism, and cell wall organization. HSF1 binds to MTA1 in vitro & in breast carcinoma. Suppression of estrogen-dependent transcription may contribute to role of HSF1 in cancer. Human cancer lines of diverse origins express higher dependence on HSF1 function to maintain proliferation and survival than their non-transformed counterparts. HSF1 induces anticoagulation and relaxation factors in vascular endothelial cells and could therefore be used to treat cardiovascular disease. HSF1 is directly involved in the regulation of HO1 having an anti-oxidative role. NF-kappaB and HSF1 are systemically activated in human acute pancreatitis. HSF1 activation protects against severity of pancreatitis. HSF is a vital transcription factor which plays a role in up-regulation of VDUP1 expression through stresses such as elevated density and serum deprivation cultures.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile filtered colorless solution.	
Formulation	
The HSF1 protein (1mg/ml) contains 20mM Tris pH-8, 50mM NaCl and 1mM DTT.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	

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Purity

Greater than 75.0% as determined by SDS-PAGE.

Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MDLPVGPGAA GPSNVPAFLT KLWTLVSDPD TDALICWSPS GNSFHVFDQG QFAKEVLPKY FKHNNMASFV RQLNMYGFRK VVHIEQGGLV KPERDDTEFQ HPCFLRGQEQ LLENIKRKVT SVSTLKSEDI KIRQDSVTKL LTDVQLMKGK QECMDSKLLA MKHENEALWR EVASLRQKHA QQQKVVNKLI QFLISLVQSN RILGVKRKIP LMLNDSGSAH SMPKYSRQFS LEHVHGSGPY SAPSPAYSSS SLYAPDAVAS SGPIISDITE LAPASPMASP GGSIDERPLS SSPLVRVKEE PPSPPQSPRV EEASPGRPSS VDTLLSPTAL IDSILRESEP APASVTALTD ARGHTDTEGR PPSPPPTSTP EKCLSVACLD KNELSDHLDA MDSNLDNLQT MLSSHGFSVD TSALLDLFSP SVTVPDMSLP DLDSSLASIQ ELLSPQEPPR PPEAENSSPD SGKQLVHYTA QPLFLLDPGS VDTGSNDLPV LFELGEGSYF SEGDGFAEDP TISLLTGSEP PKAKDPTVS.

Precautions

HSF1 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q00613)