

Product datasheet for TA326477

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OriGene Technologies, Inc.

HSF2 Rat Monoclonal Antibody [Clone ID: 3E2]

Product data:

Product Type: Primary Antibodies

Clone Name: 3E2
Applications: WB

Recommended Dilution: 4ug/ml was sufficient for detection of HSF2 of HeLa lysate

Reactivity: Human, Mouse, Rat, Guinea Pig, Hamster, Monkey, Bovine, Sheep, Pig, Rabbit, Dog

Host: Rat lgG1

Clonality: Monoclonal

Immunogen:Purified recombinant mouse HSF2 proteinFormulation:PBS pH7.2, 50% glycerol, 0.09% sodium azide

Concentration: lot specific

Purification: Protein G Purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: heat shock transcription factor 2

Database Link: NP 004497

Entrez Gene 15500 MouseEntrez Gene 64441 RatEntrez Gene 476276 DogEntrez Gene 713938

MonkeyEntrez Gene 3298 Human

Q03933





Background:

HSF2, or heat shock factor 2, belongs to a family of Heat Shock transcription factors that activate the transcription of genes encoding products required for protein folding, processing, targeting, degradation, and function. The up-regulation of HSP (heat shock proteins) expression by stressors is achieved at the level of transcription through a heat shock element (HSE) and a transcription factor (HSF). Most HSFs have highly conserved amino acid sequences. On all HSFs there is a DNA binding domain at the N-terminus. Hydrophobic repeats located adjacent to this binding domain are essential for the formation of active trimers. Towards the C-terminal region another short hydrophobic repeat exists, and is thought to be necessary for suppression of trimerization .There are two main heat shock factors, 1 and 2. Mouse HSF1 exists as two isoforms, however in higher eukaryotes HSF1 is found in a diffuse cytoplasmic and nuclear distribution in un-stressed cells. Once exposed to a multitude of stressors, it localizes to discrete nuclear granules within seconds. As it recovers from stress, HSF1 dissipates from these granules to a diffuse nuceloplasmic distribution. HSF2 on the other hand is similar to mouse HSF1, as it exists as two isoforms, the alpha form being more transciptionally active than the smaller beta form . Various experiments have suggested that HFS2 may have roles in differentiation and development.

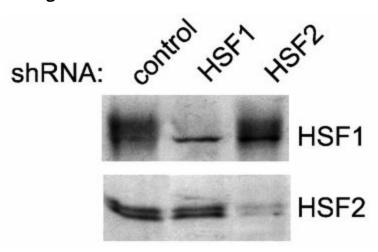
Synonyms: HSF 2; HSTF 2

Note: Detects an ~69kDa protein in unstressed cells corresponding to the molecular mass HSF2 on

SDS PAGE immunoblots.

Protein Families: Transcription Factors

Product images:



Western blot analysis (K562 cells) transiently transfected with control, HSF1 or HSF2 shRNA constructs using HSF1, HSF2 (3E2) antibodies. Courtesy of Lea Sistonen, Abo Akademi University, Finland.