

AB-PN609

HSF1-pS303+pS307 Antibody

Phosphosite-specific rabbit polyclonal antibody for HSF1



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Target Protein

Protein Name Long:	Heat shock factor protein 1
Protein Alias:	Heat shock factor 1; Heat shock transcription factor 1; HSF 1; hsf1; HSF1_HUMAN; HSTF 1; HSTF1
UniProt ID:	Q00613
Protein Molecular Mass:	57,260 Da (529 AA; Q00613-1); 52,881 Da (489 AA; Q00613-2)

Immunogen

Antibody Immunogen Source:	Synthetic phosphopeptide patterned after human HSF1
Antibody Immunogen Sequence:	EPP(pS)PPQ(pS)PRV(β A)C
Antibody Immunogen Description:	Corresponds to amino acid residues E300 to V310. S303 and S307 phosphorylation induces a repression of transcriptional activity, and induce interaction with 14-3-3 epsilon and SUMO1. These are two of the major <i>in vivo</i> phosphorylation sites in HSF1 (≥ 59 and ≥ 55 reports, respectively, from high throughput mass spectrometry studies recorded in PhosphoSitePlus). HSF1 is known to be phosphorylated <i>in vitro</i> at S303: by BARK2 (GRK3, ADRBK2), ERK1 (MAPK3), ERK2 (MAPK1), GSK3b, p38a MAPK, p38b MAPK, p38d MAPK, and p38g MAPK, and at S307 by ERK1 (MAPK3), ERK2 (MAPK1), p38a MAPK (MAPK14), p38b MAPK (MAPK11), p38d MAPK (MAPK13), and p38g MAPK (MAPK12, ERK6).
Antibody Target Type:	Phosphosite-specific

Production

Antibody Host Species:	Rabbit
Antibody Type:	Polyclonal
Antibody Isotype:	IgG
Production Method:	The immunizing peptide was produced by solid phase synthesis on a multipеп peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris.
Amount:	25 μ g
Antibody Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline pH 7.4, 0.05% Thimerasol
Storage Conditions:	For long term storage, keep frozen at -40°C or lower. Stock solution can be kept at +4°C for more than 3 months. Avoid repeated freeze-thaw cycles.
Storage Stability:	>2 years

Applications

Product Use:	Western blotting Antibody microarray
Antibody Dilution Recommended:	2 µg/ml for immunoblotting
Antibody Species Reactivity:	Human Dog Rat Mouse Platypus

This product is for *in vitro* research use only and is not intended for use in humans or animals.

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