

Datasheet for 600-401-GV3S**HSF1 Antibody****Overview**

Description:	Anti-HSF1 (RABBIT) Antibody - 600-401-GV3S
Item No.:	600-401-GV3S
Size:	25 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background: Anti-HSF1 Antibody was designed, produced, and validated as part of the Joy Cappel Young Investigator Award (JCYIA). Heat shock factor 1 (HSF1) is a highly conserved transcription factor that coordinates stress-induced transcription and directs versatile physiological processes in eukaryotes. Upon stress, HSF1 is the key transcriptional activator of chaperones, co-chaperones and ubiquitin, and also coordinates the expression of many transcriptional and translational regulators, signaling molecules and mitotic determinants. HSF1 is involved in balancing core cellular processes during stress and enables their rapid re-establishment once conditions suitable for proliferation have been restored. Importantly, HSF1 controls a distinct set of target genes in cell stress, development and cancer progression. The central role of HSF1 in diverse cellular functions is reflected in pathologies, such as neurodegenerative diseases and cancer, where an imbalance in HSF1 activity facilitates disease onset. The ability of cancer cells to harness HSF1 for metastatic progression highlights the plasticity of HSF1 in rewiring transcription and coordinating cellular processes. Anti-HSF1 antibody is thus ideal for investigators involved in cancer research and neurodegenerative diseases.

Synonyms:	rabbit anti-HSF1 antibody, HSF-1, HSF 1, heat shock factor protein 1, HSTF1, HSTF 1, HSTF-1, heat shock transcription factor 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name: HSF1

Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Affinity purified Anti-HSF1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide near the n-terminal portion of human HSF1 protein.
Purity/Specificity:	Anti-HSF1 is directed against human HSF1 at a n-terminus position. This product is an affinity purified antibody produced by immunoaffinity chromatography using peptide coupled to agarose beads. A BLAST analysis was used to suggest reactivity with this protein in mouse and bovine species based on 100% homology for the immunogen sequence.
Relevant Links:	• GeneID - 3297 • NCBI - NP_005517.1 • UniProtKB - Q00613

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Heat Shock Factor 1 Antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band of 57 kDa in size corresponding to HSF1 by western blotting in the appropriate cell lysate or extract. Tested using positive control A431 Whole Cell Lysate p/n W09-000-361.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	5 µg/ml
WB:	1 µg/ml

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.96 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

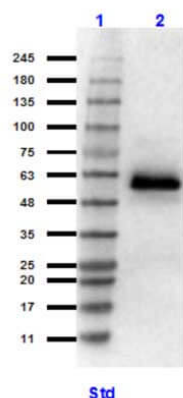
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit anti-HSF1 antibody. Lane 1: Ladder Opal PreStained (p/n MB-210-0500). Lane 2: A431 Whole Cell lysate (p/n W09-000-361). Load: 35 µg per lane. Primary antibody: HSF1 antibody at 1.0 µg/ml for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-133) at 1:70,000 for 30 min at RT. Block: Universal Buffer BlockOut (p/n MB-073) for 30 min at room temperature. Predicted/Observed size: ~57kDa for HSF1 in A431 whole cell lysate.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.