

Datasheet for ABIN672441
anti-HSP27 antibody (AA 101-205)

6 Images

3 Publications



[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	HSP27 (HSPB1)
Binding Specificity:	AA 101-205
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HSP27 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human HSP27
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Dog,Cow,Pig
Purification:	Purified by Protein A.

Target Details

Target:	HSP27 (HSPB1)
---------	---------------

Target Details

Alternative Name: [HSP27 \(HSPB1 Products\)](#)

Background: Synonyms: CMT2F, HMN2B, HSP27, HSP28, Hsp25, SRP27, HS.7667, HEL-S-12, Heat shock protein beta-1, HspB1, 28 kDa heat shock protein, Estrogen-regulated 24 kDa protein, Heat shock 27 kDa protein, HSP 27, Stress-responsive protein 27

Background: Heat Shock Protein 27 (HSP27) is a 27 kDa member of a family of proteins whose expression and function are stimulated by heat shock and other stress stimuli. A major function of these proteins is to serve as chaperones that bind to and stabilize the active conformation of other proteins. HSP27, along with other members of the small HSP group, possesses a C-terminal Alpha-crystalline homology domain. HSP27 is localized to the cytoplasm of unstressed cells but can redistribute to the nucleus in response to stress, where it may function to stabilize DNA and/or the nuclear membrane. Cytoplasmic HSP27 exists in multiple complexes. One complex consists of HSP27, Akt (PKB), MAPKAP-kinase 2, and p38 MAPK. The presence of HSP27 in this complex is required for Akt activation by stress stimuli. Another complex consists of HSP27 and the IKK complex. HSP27 is also an actin capping protein that binds to the barbed (growing) ends of actin filaments, thereby inhibiting filament extension. Phosphorylation of HSP27 on serine 82 by MAPKAP-kinase 2 leads to HSP27 dissociation from the Akt/MAPKAP-kinase 2/p38 complex and from actin filaments, and stimulates HSP27 binding to the IKK complex.

Gene ID: 3315

UniProt: [P04792](#)

Pathways: [MAPK Signaling](#), [Regulation of Actin Filament Polymerization](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Negative Regulation of intrinsic apoptotic Signaling](#), [VEGF Signaling](#)

Application Details

Application Notes: WB 1:300-5000
ELISA 1:500-1000
FCM 1:20-100
IHC-P 1:200-400
IHC-F 1:100-500
IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

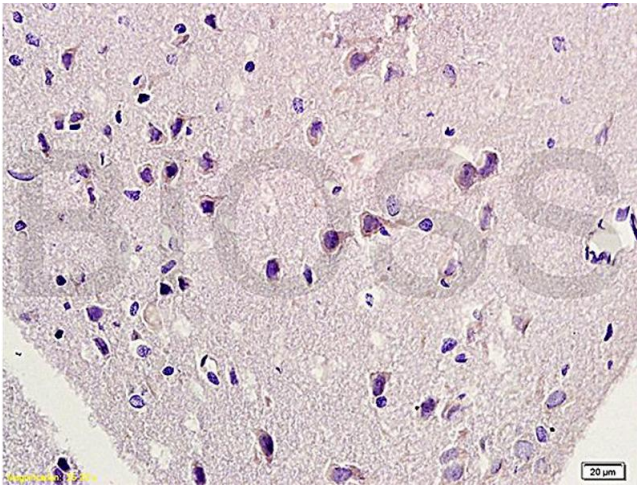
Restrictions: For Research Use only

Handling

Format:	Liquid
Concentration:	1 µg/µL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

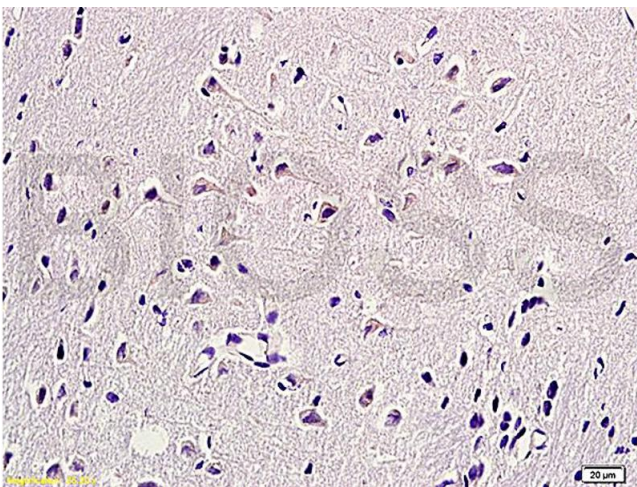
Publications

- Product cited in:
- Zhang, Feng, Wang, Dong, Gong, Pu, Chen: "Expression of Heat Shock Protein-27 (Hsp27) and P38MAPK in Esophageal Squamous Cell Carcinoma." in: **Medical science monitor : international medical journal of experimental and clinical research**, Vol. 23, pp. 5246-5253, (2018) ([PubMed](#)).
- Gao, Liu, Chen, Lv, Wu, Mi, Wang: "Comparative study of Hsp27, GSK3?, Wnt1 and PRDX3 in Hirschsprung's disease." in: **International journal of experimental pathology**, Vol. 95, Issue 3, pp. 229-37, (2014) ([PubMed](#)).
- Wang, Yang, Liu, Zhou, Wu, Qiao, Li, Wang: "Dietary supplementation with the probiotic Lactobacillus fermentum I5007 and the antibiotic aureomycin differentially affects the small intestinal proteomes of weanling piglets." in: **The Journal of nutrition**, Vol. 142, Issue 1, pp. 7-13, (2011) ([PubMed](#)).



Immunohistochemistry

Image 1. Formalin-fixed and paraffin embedded rat brain labeled with Rabbit Anti-HSP27/HspB1/HSP25 Polyclonal Antibody, Unconjugated (ABIN672441) at 1:200 followed by conjugation to the secondary antibody and DAB staining.



Immunohistochemistry

Image 2. Formalin-fixed and paraffin embedded rat brain labeled with (ABIN672441) Rabbit Anti-HSP27 HspB1 HSP25 Polyclonal Antibody, unconjugated 1: 200 followed by incubation with conjugated secondary antibody and DAB staining.

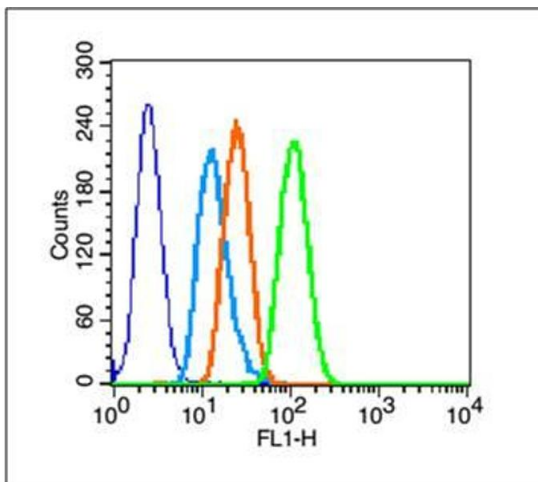


Image 3. A431 cells probed with HSP27 Polyclonal Antibody, unconjugated at 1:100 dilution for 30 minutes compared to control cells (blue) and isotype control (orange)

Please check the [product details page](#) for more images. Overall 6 images are available for ABIN672441.