ARG55955
anti-Hsp 27 antibody [G3.1]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [G3.1] recognizes Hsp 27
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	G3.1
Isotype	IgG1, kappa
Target Name	Hsp 27
Species	Human
Immunogen	Partially purified Human Hsp27 (earlier called 24K) from breast cancer MCF-7 cells.
Conjugation	Un-conjugated
Alternate Names	HSP 27; Heat shock 27 kDa protein; HMN2B; HS.76067; SRP27; HEL-S-102; HspB1; CMT2F; 28 kDa heat shock protein; HSP27; Heat shock protein beta-1; Hsp25; Estrogen-regulated 24 kDa protein; Stress-responsive protein 27; HSP28

Application Instructions

Application table

Application	Dilution
FACS	1 - 2 µg/10^6 cells
ICC/IF	2 - 5 µg/ml
IHC-P	2 - 5 µg/ml
WB	1 - 2 µg/ml

Application Note: IHC-P: Antigen Retrieval: Boil tissue section in 10 mM Citrate buffer (pH 6.0) for 10-20 min, followed by cooling at RT for 20 min.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

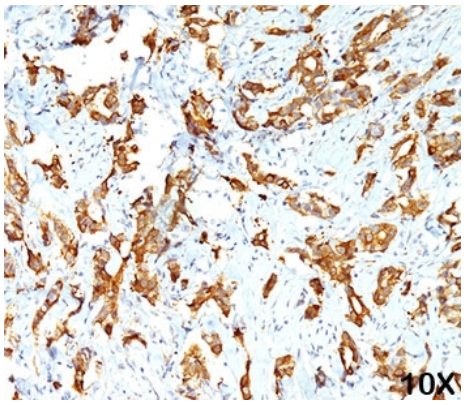
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA
Preservative	0.05% Sodium azide
Stabilizer	0.1 mg/ml BSA

Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

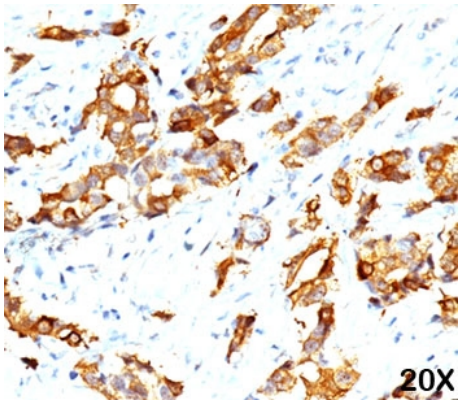
Gene Symbol	HSPB1
Gene Full Name	heat shock 27kDa protein 1
Background	The protein encoded by this gene is induced by environmental stress and developmental changes. The encoded protein is involved in stress resistance and actin organization and translocates from the cytoplasm to the nucleus upon stress induction. Defects in this gene are a cause of Charcot-Marie-Tooth disease type 2F (CMT2F) and distal hereditary motor neuropathy (dHMN). [provided by RefSeq, Oct 2008]
Function	Involved in stress resistance and actin organization. [UniProt]
Calculated Mw	23 kDa
PTM	Phosphorylated upon exposure to protein kinase C activators and heat shock (PubMed:8325890). Phosphorylation by MAPKAPK2 and MAPKAPK3 in response to stress dissociates HSPB1 from large small heat-shock protein (sHsps) oligomers and impairs its chaperone activity and ability to protect against oxidative stress effectively. Phosphorylation by MAPKAPK5 in response to PKA stimulation induces F-actin rearrangement (PubMed:1332886, PubMed:8093612, PubMed:19166925).
Cellular Localization	Predominantly cytoplasmic with some nuclear

Images



ARG55955 anti-Hsp 27 antibody [G3.1] IHC-P image

Immunohistochemistry: Human breast carcinoma (10X) stained with ARG55955 anti-Hsp 27 antibody [G3.1].



ARG55955 anti-Hsp 27 antibody [G3.1] IHC-P image

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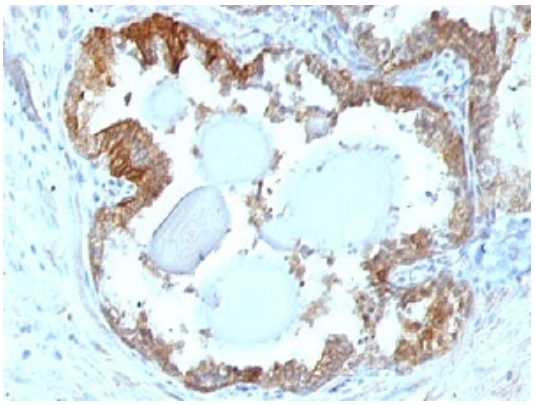

ARG55955 anti-Hsp 27 antibody [G3.1] IHC-P image

Immunohistochemistry: Formalin-fixed, paraffin-embedded Human prostate carcinoma stained with ARG55955 anti-Hsp 27 antibody [G3.1].