

U-Blot® Phospho-HSP27 (Ser78) Rabbit mAb (WT9076)

User Manual

General Information

Product name	U-Blot® Phospho-HSP27 (Ser78) Rabbit mAb
Product No.	WT9076
Clonality	Recombinant monoclonal
Clone Number	W-R49
Alternative name	Heat shock protein beta-1, HspB1, SRP27

Key Features

Target	Phospho-HSP27 (Ser78)
Reactivity	Human
Applications	WB, IHC-P, ICC/IF, IP
MW(Calculated)	23 kDa
MW(Observed)	27 kDa
Host Species	Rabbit
Isotype	IgG/Kappa
Conjugate	Unconjugated
Modification	Phosphorylation
Modification Site	Ser78
Purification	Protein A affinity purification
Immunogen	Polypeptide
Specificity	Specific for HSP27 only when phosphorylated at Ser78

Storage Information

Storage	Store at -20°C. Avoid repeated freeze-thaw cycles
Stability	Stable for 12 months from date of receipt / reconstitution.
Formulation	PBS, Glycerol, BSA

Product Usage Information

Applications	Dilution	Recommended Species
WB	1:500-1000	Human
IHC-P	1:100-500	Human
ICC/IF	1:50	Human
IP	1:50-100	Human

Target Information

Gene name	HSPB1
Protein name	Heat shock protein 27
Organism	Human
Gene ID	3315
SwissProt	P04792

Background

Hsp27 is one of the small HSPs that are constitutively expressed at different levels in various cell types and tissues. Like other small HSPs, HSP27 is regulated at both the transcriptional and posttranslational levels. In response to stress, the HSP27 expression increases several-fold to confer cellular resistance to the adverse environmental change. HSP27 is phosphorylated at Ser15, Ser78, and Ser82 by MAPKAPK-2 as a result of the activation of the p38 MAP kinase pathway. Phosphorylation of HSP27 causes a change in its tertiary structure, which shifts from large homotypic multimers to dimers and monomers. It has been shown that phosphorylation and increased concentration of HSP27 modulates actin polymerization and reorganization.

Cellular Localization	Cytoplasm, Cytoskeleton, Nucleus
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