

Anti-HSP47 SERPINH1 Antibody (Monoclonal, M16.10A1)

Catalog Number: M03050

About SERPINH1

Heat shock protein 47, also known as SERPINH1 or HSP47, is a serpin which serves as a human chaperone protein for collagen. This protein is a member of the serpin superfamily of serine proteinase inhibitors. Its expression is induced by heat shock. The protein localizes to the endoplasmic reticulum lumen and binds collagen; thus it is thought to be a molecular chaperone involved in the maturation of collagen molecules. Autoantibodies to this protein have been found in patients with rheumatoid arthritis. It has been found that HSP47 monitors the integrity of the triple helix of type I procollagen at the ER/cis-Golgi boundary and, when absent, the rate of transit from the ER to the Golgi is increased and the helical structure is compromised.

Overview

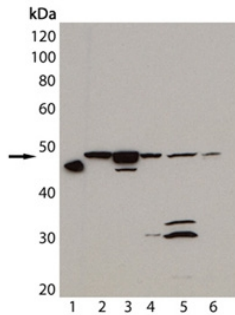
Product Name	Anti-HSP47 SERPINH1 Antibody (Monoclonal, M16.10A1)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-HSP47 SERPINH1 Antibody (Monoclonal, M16.10A1) catalog # M03050. Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IHC, WB
Clonality	Monoclonal M16.10A1
Formulation	Each vial contains 50% glycerol and 0.09% sodium azide.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P50454

Technical Details

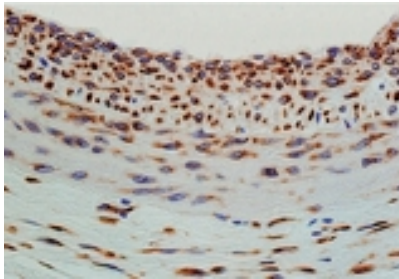
Immunogen	Native rat HSP47.
Predicted Reactive Species	Bovine, Goat, Guinea Pig, Hamster, Monkey, Sheep
Cross Reactivity	Detects ~20kDa. Does not cross-react with alphaB-crystallin, betaL-crystallin, ̢H- crystallin, gamma-crystallin, HSP25, HSP27 or HSP47 proteins.
Isotype	Mouse IgG
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.

Purification	Protein G affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>WB, 1:1,000, ECL, Human, Mouse, Rat</p> <p>IHC, 1:50, Human, Mouse, Rat</p>

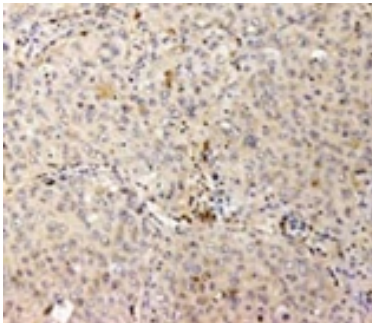
Anti-HSP47 SERPINH1 Antibody (Monoclonal, M16.10A1) (M03050) Images



Western blot analysis of HSP47 expression in recombinant rat HSP47 protein (lane 1), Rat-2 whole cell lysates (heat shocked) (lane 2), L929 whole cell lysates (heat shocked) (lane 3), 3T3 whole cell lysates (heat shocked) (lane 4), CHO whole cell lysates (heat shocked) (lane 5) and HELA whole cell lysates (heat shocked) (lane 6). HSP47 at 47KD was detected using mouse anti-HSP47 Antigen Affinity purified monoclonal antibody (Catalog # M03050) at 1:1000. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1001).



HSP47 was detected in paraffin-embedded sections of rat carotid artery tissue using mouse anti-HSP47 Antigen Affinity purified monoclonal antibody (Catalog # M03050) at 1:50. The immunohistochemical section was developed using SABC method (Catalog # SA1021).



HSP47 was detected in paraffin-embedded sections of human breast cancer tissue using mouse anti-HSP47 Antigen Affinity purified monoclonal antibody (Catalog # M03050) at 1:50. The immunohistochemical section was developed using SABC method (Catalog # SA1021).

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