Datasheet for ABIN1686616

anti-SERPINH1 antibody

3 Images

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Overview

Quantity:	200 µg
Target:	SERPINH1
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	Human HSP47, full length
Clone:	1C4-1A6
Isotype:	IgG1 kappa
Specificity:	Detects 47 kDa.
Cross-Reactivity:	Human
Purification:	Protein G Purified

Target Details

Target:	SERPINH1
Alternative Name:	HSP47 (SERPINH1 Products)
Background:	HSP47 is a chaperone protein, member of the superfamily of serine proteinase inhibitors. Also known as SERPINH1, a serine proteinase inhibitor. It is a stress protein that resides in the

Target Details

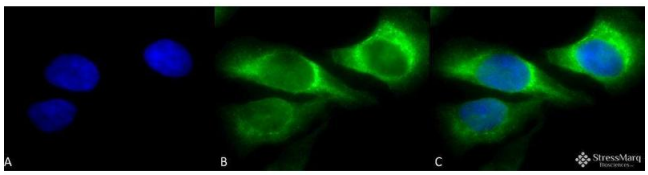
	endoplasmic reticulum, has an active role on the intracellular process of folding, assembly and secretion of pro-collagens. Recent studies have shown the association of on an increased expression of HSP47 around fibrotic lesions (1). The identification of a novel biomarker on cell therapies aimed to reduce the progression of fibrotic diseases, could be used potentially as a universal marker, since HSP47 binds a single substrate (2). Type I collagen is fundamental during the healing process after a myocardial infarction. It is critical in the position of collagen-produced cells and the assembly of collagen fibrils (3).
Gene ID:	871
NCBI Accession:	NP_001193943
UniProt:	P50454

Application Details

Application Notes:	• WB (1:1000) • ICC/IF (1:100) • optimal dilutions for assays should be determined by the user.
Comment:	1 µg/ml of ABIN1686616 was sufficient for detection of HSP47 in 20 µg of heat shocked HeLa cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

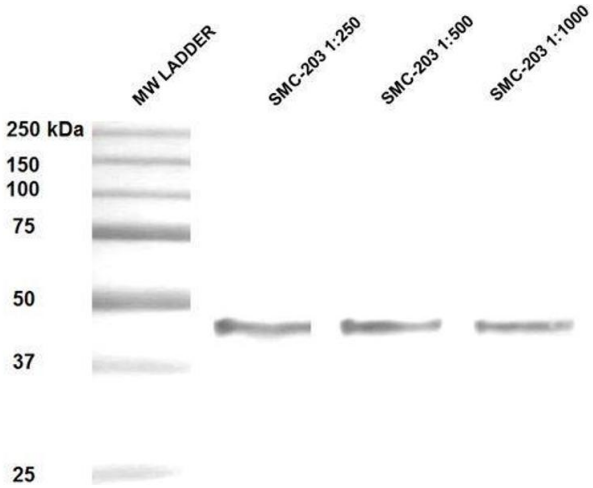
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	-20°C



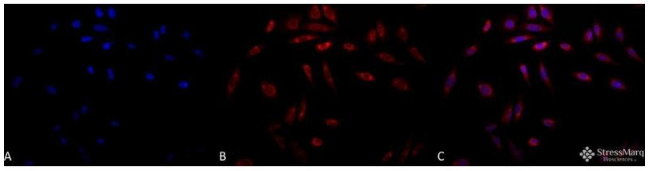
Immunofluorescence (fixed cells)

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Hsp47 Monoclonal Antibody, Clone 1C4-1A6 . Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Mouse Anti-Hsp47 Monoclonal Antibody at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Endoplasmic reticulum lumen. Cytoplasm. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-Hsp47 Antibody. (C) Composite.



Western Blotting

Image 2. Western Blot analysis of Human Epithelial cell (A431) lysates showing detection of ~47 kDa Hsp47 protein using Mouse Anti-Hsp47 Monoclonal Antibody, Clone 1C4-1A6 . Lane 1: MW ladder. Lane 2: Anti-Hsp47 (1:250). Lane 3: Anti-Hsp47 (1:500). Lane 4: Anti-Hsp47 (1:1000). Load: 20 µg. Block: 5% milk + TBST for 1 hour at RT. Primary Antibody: Mouse Anti-Hsp47 Monoclonal Antibody at 1:250 - 1:1000 for 1 hour at RT. Secondary Antibody: HRP Goat Anti-Mouse at 1:50 for 1 hour at RT. Color Development: TMB solution for 10 min at RT. Predicted/Observed Size: ~47 kDa.



Immunofluorescence (fixed cells)

Image 3. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Hsp47 Monoclonal Antibody, Clone 1C4-1A6 . Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Mouse Anti-Hsp47 Monoclonal Antibody at 1:100 for 12 hours at 4°C. Secondary Antibody: APC Goat Anti-Mouse (red) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT.

Images

Localization: Endoplasmic reticulum lumen. Cytoplasm. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-Hsp47 Antibody. (C) Composite.