

# Datasheet for ABIN2484377 anti-SERPINH1 antibody (PE)

# **Images**



| _     |       |
|-------|-------|
| Over  | //\\\ |
| OVCIV | VICVV |

| Quantity:    | 200 μg  |
|--------------|---|
| Target:      | SERPINH1  |
| Reactivity:  | Human   |
| Host:        | Mouse   |
| Clonality:   | Monoclonal  |
| Conjugate:   | This SERPINH1 antibody is conjugated to PE                                |
| 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 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:  $1~\mu\text{g/ml of ABIN}2484377~\text{was sufficient for detection of HSP47 in 20}~\mu\text{g of heat shocked HeLa}$ 

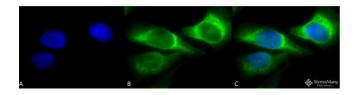
cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the

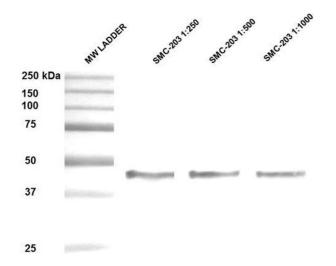
secondary antibody.

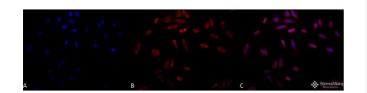
Restrictions: For Research Use only

#### 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:           | 4 °C   |
| Storage Comment:   | Conjugated antibodies should be stored at 4°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.

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