

**4-Hydroxynonenal Antibody**  
**4-Hydroxynonenal Antibody, Clone 12F7**  
**Catalog # ASM10339****Specification**

---

**4-Hydroxynonenal Antibody - Product Information**

Application	<b>WB, ICC, E</b>
Host	<b>Mouse</b>
Isotype	<b>IgG1</b>
Clonality	<b>Monoclonal</b>

**Description**

Mouse Anti-4-Hydroxynonenal (4-HNE) Monoclonal IgG1

**Target/Specificity**

Specific for 4-Hydroxynonenal (4-HNE) modified proteins. Does not detect free 4-Hydroxynonenal. Does not cross-react with 4-Hydroxy-2-hexenal, Acrolein, Crotonaldehyde, Hexanoyl Lysine, Malondialdehyde, or Methylglyoxal modified proteins.

**Other Names**

4-Hydroxynonenal Antibody, 4-Hydroxy Nonenal (4-HNE) Antibody, 4-Hydroxy Nonenal Antibody, 4-HNE Antibody, 4-hydroxy Hexenal Antibody, HNE Antibody, 4-hydroxy-2-nonenal Antibody

**Trademark****MOLECULAR SIGNATURE®****Immunogen**

Synthetic 4-Hydroxynonenal modified Keyhole Limpet Hemocyanin (KLH).

**Purification**

Protein G Purified

**Storage****-20°C****Storage Buffer**

PBS pH 7.4, 50% glycerol, 0.9% Sodium Azide

**Shipping Temperature****Blue Ice or 4°C****Certificate of Analysis**

A 1:1000 dilution of SMC-511 was sufficient for detection of 4-Hydroxynonenal in 0.5 µg of 4-Hydroxynonenal conjugated to BSA by ECL immunoblot analysis using Goat Anti-Mouse IgG:HRP as the secondary Antibody.

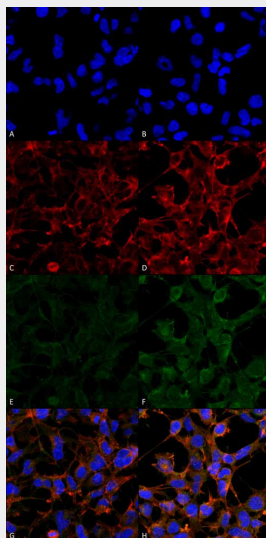
**4-Hydroxynonenal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

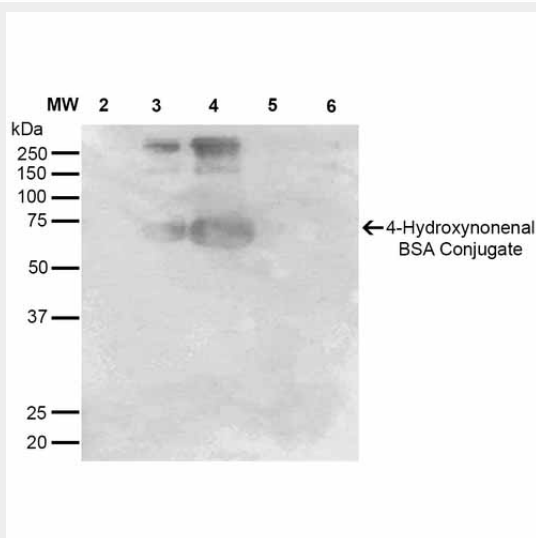
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

#### 4-Hydroxynonenal Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-4-Hydroxynonenal Monoclonal Antibody, Clone 12F7 (ASM10339). Tissue: Embryonic kidney cells (HEK293). Species: Human. Fixation: 5% Formaldehyde for 5 min. Primary Antibody: Mouse Anti-4-Hydroxynonenal Monoclonal Antibody (ASM10339) at 1:50 for 30-60 min at RT. Secondary Antibody: Goat Anti-Mouse Alexa Fluor 488 at 1:1500 for 30-60 min at RT. Counterstain: Phalloidin Alexa Fluor 633 F-Actin stain; DAPI (blue) nuclear stain at 1:250, 1:50000 for 30-60 min at RT. Magnification: 20X (2X Zoom). (A,C,E,G) - Untreated. (B,D,F,H) - Cells cultured overnight with 50  $\mu$ M H<sub>2</sub>O<sub>2</sub>. (A,B) DAPI (blue) nuclear stain. (C,D) Phalloidin Alex Fluor 633 F-Actin stain. (E,F) 4-Hydroxynonenal Antibody. (G,H) Composite. Courtesy of: Dr. Robert Burke, University of Victoria.



Western Blot analysis of 4-hydroxy-nonenal-BSA Conjugate showing detection of 67 kDa 4-hydroxy-nonenal-BSA using Mouse Anti-4-hydroxy-nonenal Monoclonal Antibody, Clone 12F7 (ASM10339). Lane 1: Molecular Weight Ladder (MW). Lane 2: BSA (0.5  $\mu$ g). Lane 3: 4-hydroxynonenal-BSA (0.5  $\mu$ g). Lane 4: 4-hydroxynonenal-BSA (2.0  $\mu$ g). Lane 5: 4-hydroxy-2-hexenal (0.5  $\mu$ g). Lane 6: 4-hydroxy-2-hexenal (2.0  $\mu$ g). Block: 5% Skim Milk in TBST. Primary Antibody: Mouse Anti-4-hydroxy-nonenal Monoclonal Antibody (ASM10339) at 1:1000 for 2 hours at RT. Secondary

Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution for 5 min in RT. Predicted/Observed Size: 67 kDa.