

#### Acrolein Antibody

Acrolein Antibody, Clone 2H2 Catalog # ASM10332

### Specification

# Acrolein Antibody - Product Information

ApplicationICC/IF, WB, FCHostMouseIsotypeIgG1ClonalityMonoclonalDescriptionMonoclonal IgG1

#### Target/Specificity

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

**Other Names** 

Acrolein modified protein Antibody, Acrolein conjugated protein Antibody, 2-Propen-1-one Antibody, 2-propenal Antibody, Acraldehyde Antibody, Acrolein Antibody, Acrylic aldehyde Antibody, Protein-bound Acrolein Antibody

Trademark MOLECULAR SIGNATURE® Immunogen Synthetic Acrolein modified Keyhole Limpet Hemocyanin (KLH).

Purification Protein G Purified

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

### Shipping Temperature

**Certificate of Analysis** A 1:1000 dilution of SMC-504 was sufficient for detection of Acrolein in 2 µg of Acrolein conjugated to BSA by ECL immunoblot analysis using Goat Anti-Mouse IgG:HRP as the secondary Antibody.

## Acrolein Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

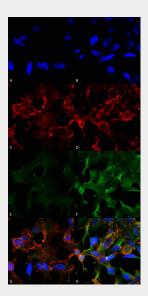
-20ºC

Blue Ice or 4ºC

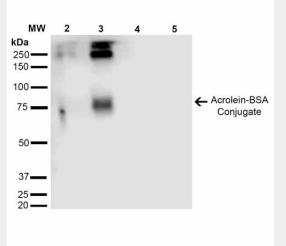


<u>Flow Cytomety</u>
Cell Culture

Acrolein Antibody - Images



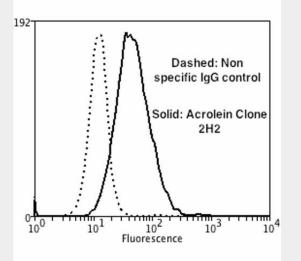
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Acrolein Monoclonal Antibody, Clone 2H2 (ASM10332). Tissue: Embryonic kidney cells (HEK293). Species: Human. Fixation: 5% Formaldehyde for 5 min. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ASM10332) at 1:50 for 30-60 min 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 µM H2O2. (A,B) DAPI (blue) nuclear stain. (C,D) Phalloidin Alex Fluor 633 F-Actin stain. (E,F) Acrolein Antibody. (G,H) Composite. Courtesy of: Dr. Robert Burke, University of Victoria.



Western Blot analysis of Acrolein-BSA Conjugate showing detection of 67 kDa Acrolein-BSA using Mouse Anti-Acrolein Monoclonal Antibody, Clone 2H2 (ASM10332). Lane 1: Molecular Weight Ladder (MW). Lane 2: Acrolein-BSA (0.5  $\mu$ g). Lane 3: Acrolein-BSA (2.0  $\mu$ g). Lane 4: BSA (0.5  $\mu$ g). Lane 5: BSA (2.0  $\mu$ g). Block: 5% Skim Milk in TBST. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ASM10332) 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.



Flow Cytometry analysis using Mouse Anti-Acrolein Monoclonal Antibody, Clone 2H2 (ASM10332). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 90% Methanol. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ASM10332) at 1:50 for 30 min on ice. Secondary Antibody: Goat Anti-Mouse: PE at 1:100 for 20 min at RT. Cells were subject to oxidative stress by treating with 250  $\mu$ M H2O2 for 24 hours.