

**Acrolein Antibody**  
**Acrolein Antibody, Clone 10A10**  
**Catalog # ASM10333****Specification**

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**Acrolein Antibody - Product Information**

|             |                       |
|-------------|-----------------------|
| Application | <b>WB, ICC, FC, E</b> |
| Host        | <b>Mouse</b>          |
| Isotype     | <b>IgG1</b>           |
| Clonality   | <b>Monoclonal</b>     |
| Format      | <b>Unconjugated</b>   |

**Description**

Mouse Anti-Acrolein conjugated protein Monoclonal 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****-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-505 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.

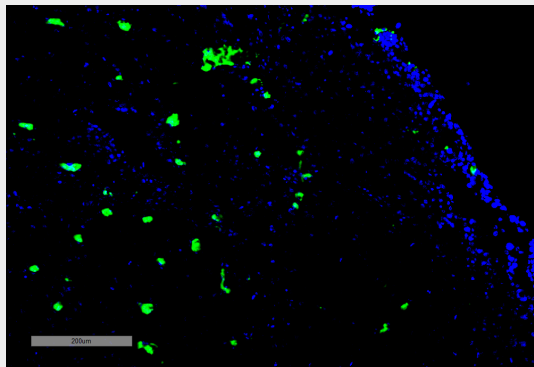
**Acrolein Antibody - Protocols**

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

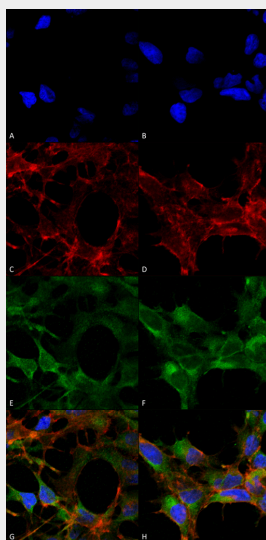
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

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

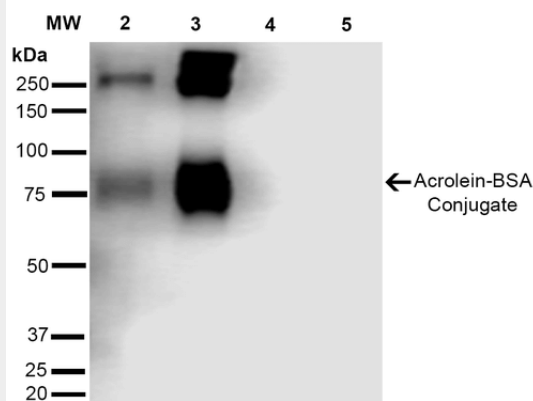
## Acrolein Antibody - Images



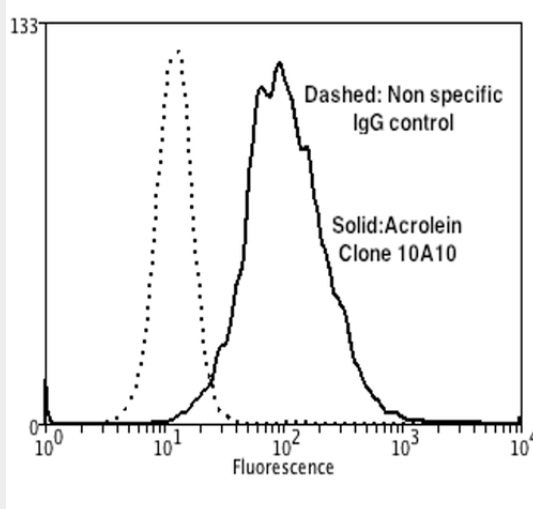
Immunohistochemistry analysis using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10 (ASM10333). Tissue: Adrenal Carcinoma. Species: Human. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ASM10333) at 1:100 for Overnight at 4C, then 30 min at 37C. Secondary Antibody: Goat Anti-Mouse IgG (H+L): FITC for 45 min at 37C. Counterstain: DAPI for 3 min at RT. Magnification: 5X.



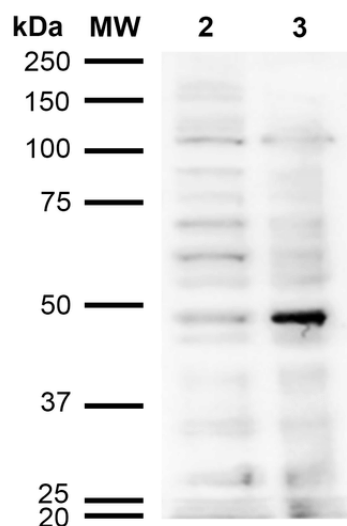
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10 (ASM10333). Tissue: Embryonic kidney epithelial cell line (HEK293). Species: Human. Fixation: 5% Formaldehyde for 5 min. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ASM10333) at 1:50 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 H<sub>2</sub>O<sub>2</sub>. (A,B) DAPI (blue) nuclear stain. (C,D) Phalloidin Alexa 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 protein using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10 (ASM10333). Lane 1: Molecular Weight Ladder (MW). Lane 2: AcroleinBSA (0.5 µg). Lane 3: AcroleinBSA (2.0 µg). Lane 4: BSA (0.5 µg). Lane 5: BSA (2.0 µg). Block: 5% Skim Milk in TBST. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ASM10333) 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 10A10 (ASM10333). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 90% Methanol. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ASM10333) at 1:50 for 30 min on ice. Secondary Antibody: Goat Anti-Mouse: PE at 1:100 for 20 min at RT. Isotype Control: Non Specific IgG. Cells were subject to oxidative stress by treating with 250 µM H<sub>2</sub>O<sub>2</sub> for 24 hours.



Western Blot analysis of Human Cervical cancer cell line (HeLa) lysate showing detection of Acrolein protein using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10 (ASM10333). Lane 1: Molecular Weight Ladder (MW). Lane 2: HeLa cell lysate. Lane 3: H<sub>2</sub>O<sub>2</sub> treated HeLa cell lysate. Load: 12 µg. Block: 5% Skim Milk in TBST. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ASM10333) 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.