10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

Acrolein Antibody
Acrolein Antibody, Clone 10A10
Catalog # ASM10333

Specification

Acrolein Antibody - Product Information

Application	ICC/IF, WB, FC
Host	Mouse
Isotype	IgG1
Clonality	Monoclonal

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).

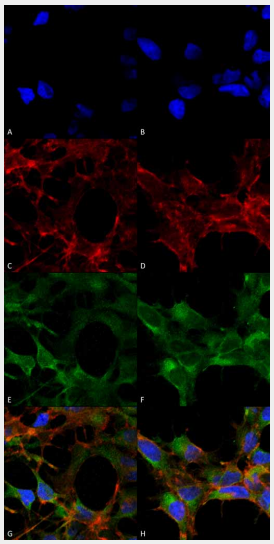
Purification
Protein G Purified

Storage	-20ºC

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

Shipping Temperature	Blue Ice or 4ºC

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.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10 (ASM10333). Tissue: Embryonic kidney cells (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 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.

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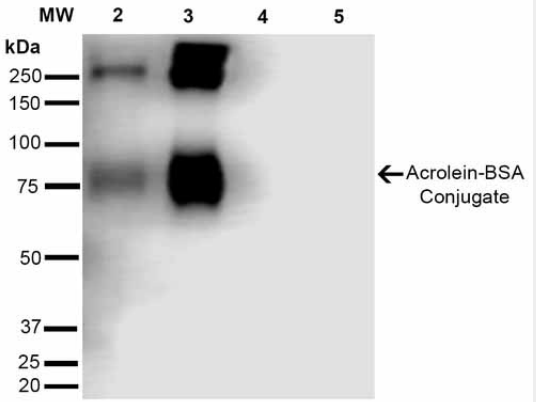
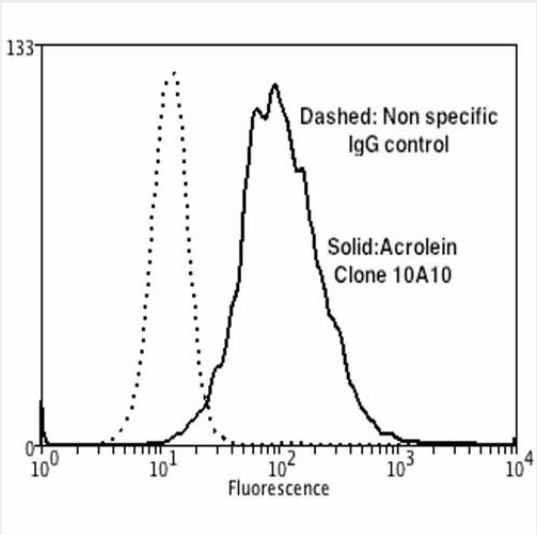
Acrolein Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Western Blot analysis of Acrolein-BSA Conjugate showing detection of 67 kDa Acrolein-BSA 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

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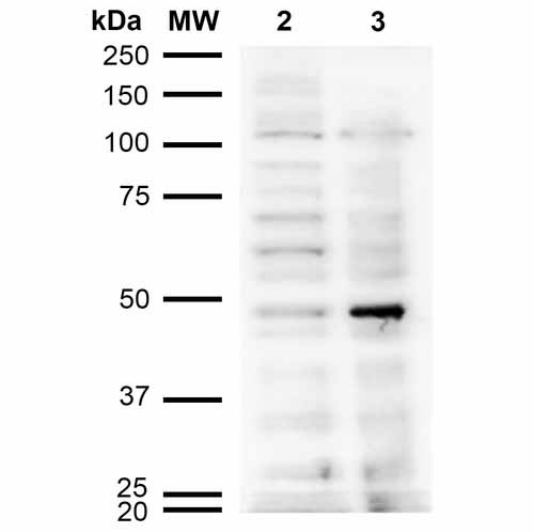
(ASM10333) at 1:50 for 30 min on ice. Secondary Antibody: Goat Anti-Mouse: PE at 1:100 for 20 min at RT. Cells were subject to oxidative stress by treating with 250 µM H2O2 for 24 hours.



Western Blot analysis of Human Cervical Cancer cell line (HeLa) showing detection of Acrolein-BSA using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10 (ASM10333). Lane 1: Molecular Weight Ladder (MW). Lane 2: HeLa cell lysate. Lane 3: H2O2 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.