

# Datasheet for ABIN5067192

# anti-Acrolein antibody (Biotin)





### Overview

Quantity:	100 μg	
Target:	Acrolein (ACR)	
Host:	Mouse	
Clonality:	Monoclonal	
Conjugate:	This Acrolein antibody is conjugated to Biotin	
Application:	ELISA, Flow Cytometry (FACS), Western Blotting (WB), Immunocytochemistry (ICC), Immunofluorescence (IF), Immunohistochemistry (IHC)	

### **Product Details**

Immunogen:	Synthetic Acrolein modified Keyhole Limpet Hemocyanin (KLH).	
Clone:	10A10	
Isotype:	lgG1	
Specificity:	Specific for Acrolein modified proteins. Does not detect free acrolein. Does not X-react with Crotonaldehyde, Hexanoyl Lysine, 4-HHE, 4-HNE, MDA, or Methylglyoxal modified proteins.	
Purification:	Protein G Purified	

## Target Details

Target:	Acrolein (ACR)
Alternative Name:	Acrolein (ACR Products)
Target Type:	Chemical

### **Target Details**

### Background:

Lipid peroxidation occurs when oxidizing agents attack carbon-carbon double bonds found in unsaturated lipids. In addition to membrane degradation, oxidation end-products have been found to damage cell viability through their mutagenic and toxic properties. These downstream functional consequences facilitate the development of disease and premature aging. Acrolein is an electrophilic conjugated aldehyde that is a terminal product of lipid peroxidation. Acrolein is highly mutagenic and reacts with nucleophilic functional groups in DNA and proteins such as cysteine, histidine, and lysine residues (1).

## **Application Details**

Λn	plication	Motoo:
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- WB (1:1000)
- ICC/IF (1:50)
- FACS (1:50)
- FCM (1:50)
- ELISA (1:1000)
- optimal dilutions for assays should be determined by the user.

#### Comment:

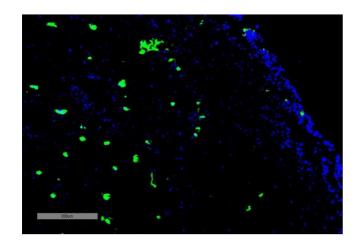
A 1:1000 dilution of ABIN5067192 was sufficient for detection of Acrolein in 2  $\mu$ g of Acrolein conjugated to BSA by ECL immunoblot analysis using Goat Anti-Mouse IgG:HRP as the secondary Antibody.

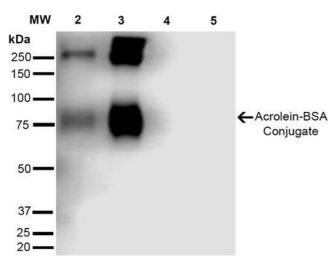
Restrictions:

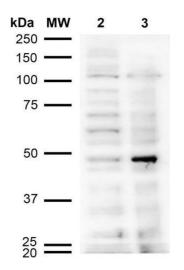
For Research Use only

### 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







### **Immunohistochemistry**

Image 1. Immunohistochemistry analysis using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10 (ABIN5067192). Tissue: Adrenal Carcinoma. Species: Human. Primary Antibody: Mouse Anti-Acrolein Monoclonal Antibody (ABIN5067192) 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.

### **Western Blotting**

Image 2. Western Blot analysis of Acrolein-BSA Conjugate showing detection of 67 kDa Acrolein-BSA using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10 . 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 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.

### **Western Blotting**

Image 3. Western Blot analysis of Human Cervical Cancer cell line (HeLa) showing detection of Acrolein-BSA using Mouse Anti-Acrolein Monoclonal Antibody, Clone 10A10. 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 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.

Please check the product details page for more images. Overall 5 images are available for ABIN5067192.