

**Methylglyoxal Antibody**  
**Methylglyoxal Antibody, Clone 9E7**  
**Catalog # ASM10344****Specification****Methylglyoxal Antibody - Product Information**

**Application** WB, ICC, FC, E  
**Host** Mouse  
**Isotype** IgG2a  
**Clonality** Monoclonal

**Description**

Mouse Anti-Methylglyoxal (MG) Monoclonal IgG2a

**Target/Specificity**

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

**Other Names**

Methylglyoxal Antibody, 2-Oxopropanal Antibody, 2 oxo propanal Antibody, MG Antibody, Pyruvaldehyde Antibody, Methylglyoxal (MG) Antibody, MG-modified protein Antibody

**Trademark** MOLECULAR SIGNATURE®

**Immunogen**

Synthetic Methylglyoxal 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**

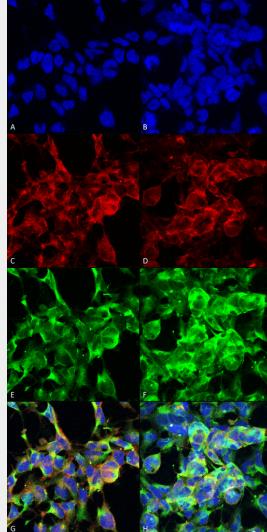
A 1:1000 dilution of SMC-516 was sufficient for detection of Methylglyoxal in 0.5 µg of Methylglyoxal conjugated to BSA by ECL immunoblot analysis using Goat Anti-Mouse IgG:HRP as the secondary Antibody.

**Methylglyoxal Antibody - Protocols**

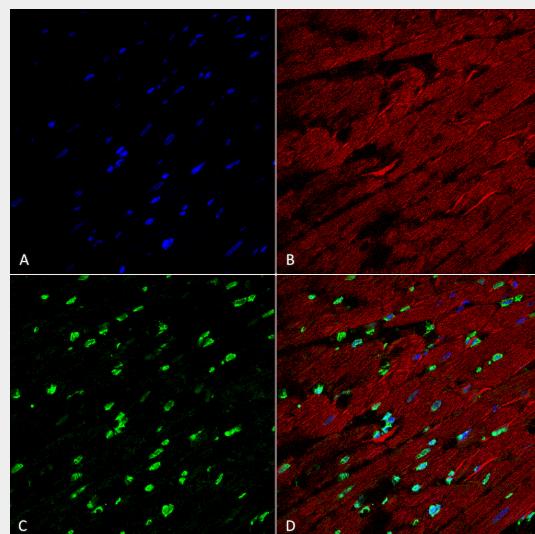
Provided below are standard protocols that you may find useful for product applications.

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

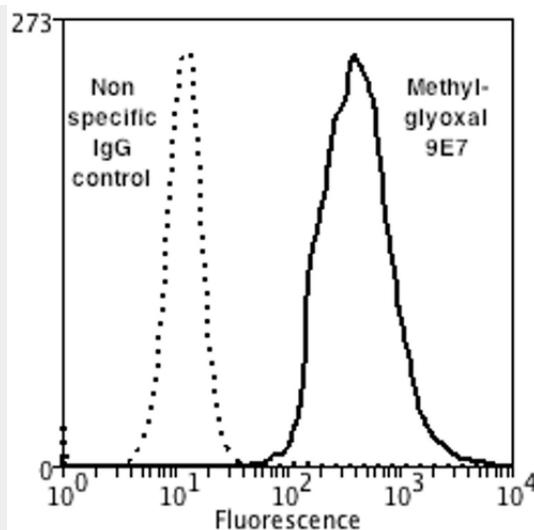
- [Flow Cytometry](#)
- [Cell Culture](#)

**Methylglyoxal Antibody - Images**

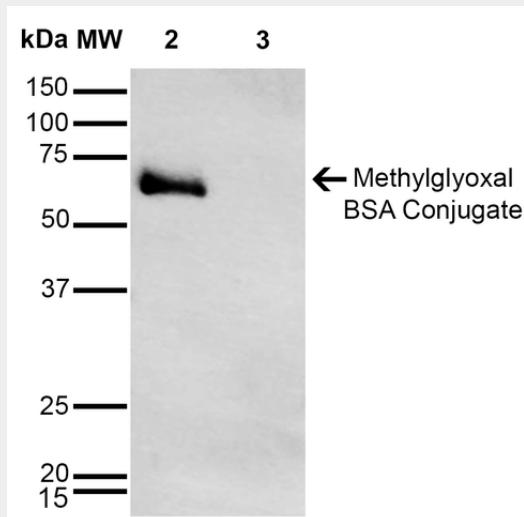
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Methylglyoxal Monoclonal Antibody, Clone 9E7 (ASM10344). Tissue: Embryonic kidney epithelial cell line (HEK293). Species: Human. Fixation: 5% Formaldehyde for 5 min. Primary Antibody: Mouse Anti-Methylglyoxal Monoclonal Antibody (ASM10344) 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 H2O2. (A,B) DAPI (blue) nuclear stain. (C,D) Phalloidin Alexa Fluor 633 F-Actin stain. (E,F) Methylglyoxal Antibody. (G,H) Composite. Courtesy of: Dr. Robert Burke, University of Victoria.



Immunohistochemistry analysis using Mouse Anti-Methylglyoxal Monoclonal Antibody, Clone 9E7 (ASM10344). Tissue: Heart. Species: Rat. Fixation: Formalin fixed, paraffin embedded. Primary Antibody: Mouse Anti-Methylglyoxal Monoclonal Antibody (ASM10344) at 1:25 for 3 hour at RT. Secondary Antibody: Goat Anti-Mouse IgG: Alexa Fluor 488. Counterstain: DAPI (blue) nuclear stain. Magnification: 63X. (A) DAPI (blue) nuclear stain. (B) Actin (C) Methylglyoxal Antibody (D) Composite.



Flow Cytometry analysis using Mouse Anti-Methylglyoxal Monoclonal Antibody, Clone 9E7 (ASM10344). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 90% Methanol. Primary Antibody: Mouse Anti-Methylglyoxal Monoclonal Antibody (ASM10344) 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  $\mu$ M H<sub>2</sub>O<sub>2</sub> for 24 hours.



Western Blot analysis of Methylglyoxal-BSA Conjugate showing detection of 67 kDa Methylglyoxal protein using Mouse Anti-Methylglyoxal Monoclonal Antibody, Clone 9E7 (ASM10344). Lane 1: Molecular Weight Ladder (MW). Lane 2: Methylglyoxal-BSA. Lane 3: BSA. Load: 0.5  $\mu$ g. Block: 5% Skim Milk in TBST. Primary Antibody: Mouse Anti-Methylglyoxal Monoclonal Antibody (ASM10344) at 1:1000 for 2 hours at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 60 min at RT. Color Development: ECL solution for 5 min in RT. Predicted/Observed Size: 67 kDa.