

**N-terminal Arginylation Antibody**  
**N-terminal Arginylation Antibody, Clone 4A9**  
**Catalog # ASM10171**

**Specification**

**N-terminal Arginylation Antibody - Product Information**

Application	WB
Host	Mouse
Isotype	IgG1
Clonality	Monoclonal

**Description**

Mouse Anti-N-terminal Arginylation Monoclonal IgG1

**Target/Specificity**

Specific for N-terminal arginine next to glutamic acid. Does not detect N-terminal arginine next to aspartic acid or internal arginine residues.

**Other Names**

N-terminal Arginine Antibody, N-terminal Arginylation Antibody, N-terminal Arginylated Antibody, N terminal Arginine Antibody, N terminal Arginylation Antibody, N terminal Arginylated Antibody, Amino-terminal Arginine Antibody, Amino-terminal Arginylation Antibody, Amino-terminal Arginylated Antibody, Amino terminal Arginine Antibody, Amino terminal Arginylation Antibody, Amino terminal Arginylated Antibody

**Immunogen**

Synthetic N-terminal arginylated peptide conjugated to 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-263 was sufficient for detection of N-terminal Arginylation in 0.5 ug of N-terminal Arginine peptide conjugated to BSA by ECL immunoblot analysis using goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Endoplasmic Reticulum

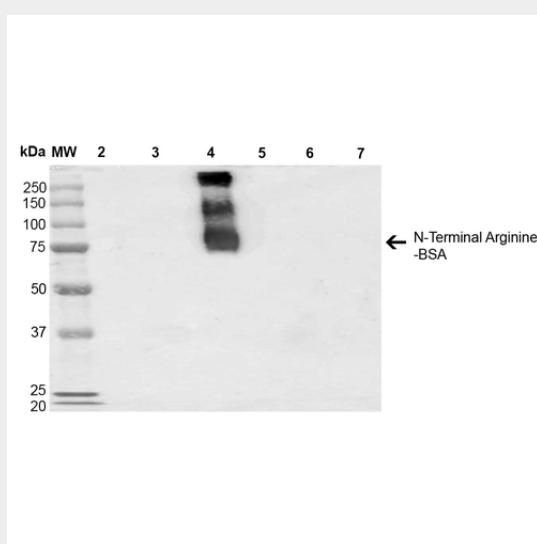
**N-terminal Arginylation Antibody - Protocols**

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

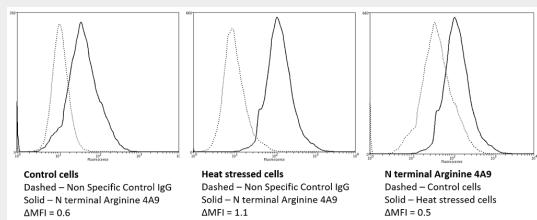
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### N-terminal Arginylation Antibody - Images



Western Blot analysis of N-terminal Arginine-BSA showing detection of 67 kDa N-terminal Arginylation protein using Mouse Anti-N-terminal Arginylation Monoclonal Antibody, Clone 4A9 (ASM10171). Lane 1: Molecular Weight Ladder (MW). Lane 2: BSA. Lane 3: RDHKH-BSA. Lane 4: REHKH-BSA. Lane 5: HKH-BSA. Lane 6: HKERD-BSA. Lane 7: HKRRE-BSA. Load: 0.5  $\mu$ g. Block: 5% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-N-terminal Arginylation Monoclonal Antibody (ASM10171) at 1:1000 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:2000 for 60 min at RT. Color Development: ECL solution (Super Signal West Pico) for 5 min in RT. Predicted/Observed Size: 67 kDa. Other Band(s): 250kDa, 150kDa, 75kDa REHKH-BSA.



Flow Cytometry analysis using Mouse Anti-N-terminal Arginylation Monoclonal Antibody, Clone 4A9 (ASM10171). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 90% Methanol. Primary Antibody: Mouse Anti-N-terminal Arginylation Monoclonal Antibody (ASM10171) 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. Heat stressed cells were subject to heat shock at 42°C for 2 hours.

### N-terminal Arginylation Antibody - Background

Protein arginylation is the post-translational addition of arginine to proteins by arginyltransferase ATE1. Arginylation of proteins has been found to play an essential role in physiological pathways during embryogenesis and adulthood (1). Arginylation has also been shown to regulate cell stress responses, including ER stress, cytosolic misfolded proteins, and heat stress (2).

### **N-terminal Arginylation Antibody - References**

1. Saha S. and Kashina A. (2011) Dev Biol. 385(1): 1-8.
2. Deka K., et al. (2016) Cell Death Discov. 2: 16074.