# MonoMethyl-Histone H3-K36 Rabbit pAb

**Catalog No.: RA8023**

## Basic Information

**Observed MW**
17KDa

**Calculated MW**
16kDa

**Category**
Primary antibody

**Applications**
IF/ICC

**Cross-Reactivity**
Human

## Background

Since it is highly conserved across species, the antibody may react with many other species.

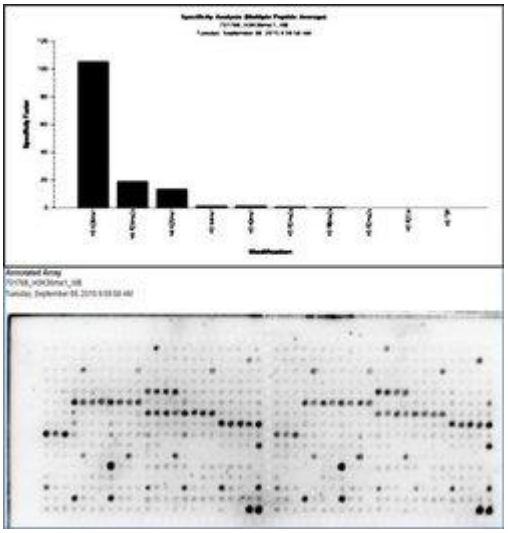
Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

## Recommended Dilutions

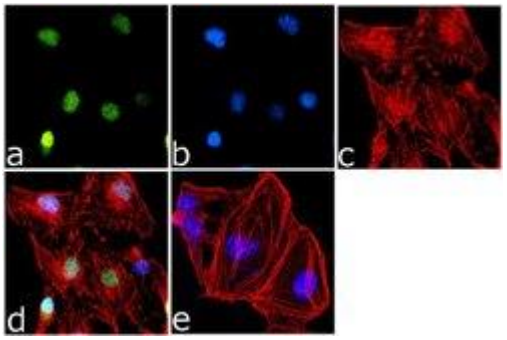
| | |
|---|---|
| **IF/ICC** | 0.5 μg/mL |
| **Array** | 1-2 μg/mL |
| **WB** | 1-2 μg/mL |

## Product Information

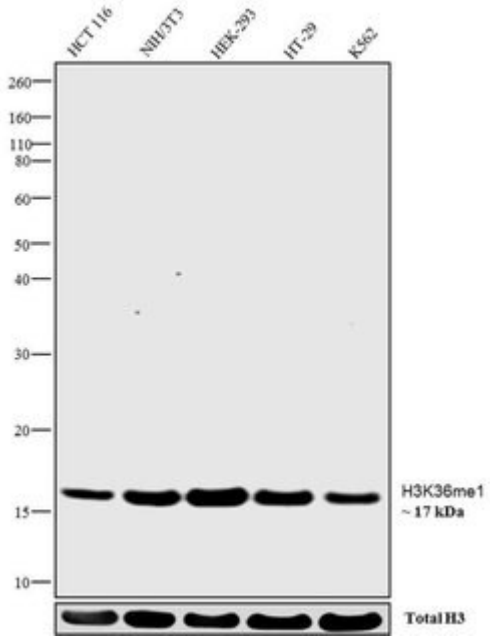
| | |
|---|---|
| **Source** | Rabbit |
| **Isotype** | IgG |
| **Purification** | Protein A |
| **Storage Conditions** | Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles. |
| **Storage buffer** | PBS, pH 7.2 |



**H3K36me1 Antibody**
Antibody specificity for modified targets can be established using peptide arrays by quantifying detection of the target protein along with closely related proteins (belonging to same family). Peptide Array of Histone H3K36me1 using Histone H3K36me1 Recombinant Rabbit Monoclonal Antibody (14H6L21): An array of the specific peptide and other relevant peptides when tested using Histone H3K36me1 Antibody showed that the H3K36me1 modification was specifically recognized by the antibody. Peptide array validation info.




**H3K36me1 Antibody in IF**
Immunofluorescence was performed on fixed and permeabilized HeLa cells for detection of Histone H3K36me1 using Anti-Histone H3K36me1 Recombinant Rabbit Monoclonal Antibody (0.5 µg/mL) and labeled with Goat antiRabbit IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (1:2000). Panel a) shows representative cells that were stained for detection and localization of Histone H3K36me1 protein (green), Panel b) is stained for nuclei (blue) using SlowFade® Gold Antifade Mountant with DAPI . Panel c) represents cytoskeletal F-actin staining using Alexa Fluor® 555 Rhodamine Phalloidin . Panel d) is a composite image of Panels a, b and c clearly demonstrating nuclear localization of Histone H3K36me1. Panel e) represents control cells with no primary Antibody to assess background.




**H3K36me1 Antibody in WB**
Western blot analysis was performed on acid cell extracts (30 µg lysate) of HCT 116 (Lane1), NIH/3T3 (Lane 2), HEK-293 (Lane 3), HT-29 (Lane 4) and K562 (Lane 5). The blots were probed with Anti-Histone H3K36me1 Recombinant Rabbit Monoclonal Antibody and detected by chemiluminescence using Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (0.4 µg/mL, 1:2500 dilution). A clear 17kDa band corresponding to Histone H3K36me1 was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex®NuPAGE®4-12% Bis- Tris gel , XCell SureLock™ Electrophoresis System , and Novex® Sharp Pre-Stained Protein Standard . Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® Dry Blotting System . The membrane was probed with the relevant primary and secondary antibody following blocking with 5% skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western blotting Substrate .