

Basic Information

Product Name	Anti-RMI2 Antibody	
Gene Name	RMI2	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IHC-F, ICC, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence of human RMI2(KMTDLSDNPIHESMWLEVEDLHRNIP).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	17KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunohistochemistry in frozen section: 1:50-400 Immunocytochemistry in fixed cells: 1:50-400 Flow cytometry (FCM): 1-3 μ g/1x10 ⁶ cells (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

RMI2 is a component of the BLM (RECQL3) complex, which plays a role in homologous recombination-dependent DNA repair and is essential for genome stability. This gene is mapped to 16p13.13. RMI1 and RMI2 were present in approximately stoichiometric amounts with other BLM complex components, including topoisomerase-3-alpha (TOP3A), RPA (see RPA1), and BLAP250. RMI2 also associated with RMI1 and TOP3A in a second complex. RMI1 and RMI2 interacted directly, and both were essential for stability of the BLM complex. Depletion of either RMI1 or RMI2 depleted the other protein by 80 to 90%. Chicken DT40 cells depleted of Rmi2 displayed elevated sister chromatid exchange, but other functions of the BLM complex appeared intact. Mutation analysis revealed that interaction between human RMI2 and BLM was essential for suppression of sister chromatid exchange.

Selected Validation Data

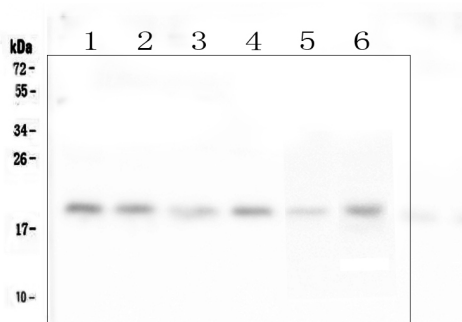


Figure 1. Western blot analysis of RMI2 using anti-RMI2 antibody (A08685). Lane 1: human Hela whole cell lysates, Lane 2: human T-47D whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human K562 whole cell lysates, Lane 5: rat thymus tissue lysates, Lane 6: mouse HEPA1-6 whole cell lysates. anti-RMI2 antigen affinity purified polyclonal antibody (Catalog # A08685) probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for RMI2 at approximately 19KD. The expected band size for RMI2 is at 17KD.

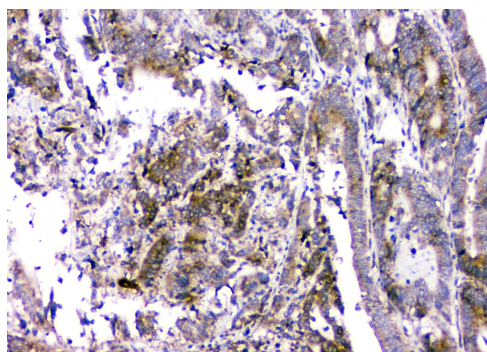


Figure 2. IHC analysis of RMI2 using anti-RMI2 antibody (A08685). RMI2 was detected in paraffin-embedded section of human intestinal cancer tissue. anti-RMI2 Antibody (A08685). Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

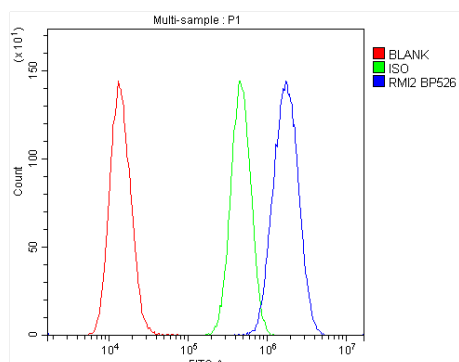


Figure 7. Flow Cytometry analysis of U2OS cells using anti-RMI2 antibody (A08685). Overlay histogram showing U2OS cells stained with A08685 (Blue line). anti-RMI2 Antibody (A08685, 1µg/1x10⁶ cells) for 30 min at 20°C. DyLight488 conjugated goat anti-rabbit IgG (BA1127, 5-10µg/1x10⁶ cells) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.