

Rabbit MCM4 Polyclonal Antibody | anti-MCM4 antibody

Anti-MCM4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19257	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

MCM4; Polyclonal Antibody; Anti-MCM4 Antibody; CDC21; DNA replication licensing factor MCM4; CDC21 homolog; P1-CDC21; minichromosome maintenance complex component 4; anti-MCM4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for MCM4 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-MCM4 antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.1-0.25ug/ml Human, Mouse, Rat IHC-P: 2-5ug/ml Human, Mouse, Rat ICC/IF: 5ug/ml Human FC/FACS/FCM: 1-3ug/1x10 ⁶ cells Human Direct ELISA: 0.1-0.5ug/ml Human
Immunogen	E Coli-derived human MCM4 recombinant protein (Position: M361-A677).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



FCM (Flow Cytometry)

Figure 8. Flow Cytometry analysis of A549 cells using anti-MCM4 antibody (AAA19257). Overlay histogram showing A549 cells stained with AAA19257 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MCM4 Antibody (AAA19257, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. 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.



IF (Immunofluorescence)

Figure 7. IF analysis of MCM4 using anti-MCM4 antibody (AAA19257).MCM4 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL rabbit anti-MCM4 Antibody (AAA19257) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 6. IHC analysis of MCM4 using anti-MCM4 antibody (AAA19257).MCM4 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-MCM4 Antibody (AAA19257) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 5. IHC analysis of MCM4 using anti-MCM4 antibody (AAA19257).MCM4 was detected in paraffin-embedded section of human gallbladder adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-MCM4 Antibody (AAA19257) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 4. IHC analysis of MCM4 using anti-MCM4 antibody (AAA19257).MCM4 was detected in paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-MCM4 Antibody (AAA19257) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).



IHC (Immunohistochemistry)

Figure 3. IHC analysis of MCM4 using anti-MCM4 antibody (AAA19257).MCM4 was detected in paraffin-embedded section of rat colon tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-MCM4 Antibody (AAA19257) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # with DAB as the chromogen).

ADDITIONAL INFORMATION

Related Product Information for anti-MCM4 antibody	MCM4(MINICHROMOSOME MAINTENANCE, S. CERVISIAE, HOMOLOG OF, 4), also called CDC21, S. POMBE, HOMOLOG OF, is a protein that in humans is encoded by the MCM4 gene. MCM4 is one of the highly conserved mini-chromosome maintenance proteins(MCM) that are essential for the initiation of eukaryotic genome replication. The MCM4 gene is mapped to 8q11. 21. The 864-amino acid MCM4 protein has an observed molecular mass of 97 kD by SDS-PAGE, which is similar to its calculated molecular mass of 96. 6 kD. Western blot analysis with and without phosphatase treatment suggested that MCM4 is highly phosphorylated in mitotic cells. In the absence of DDK, CDK phosphorylation at the distal part of the Mcm4 NSD becomes crucial. MCM4 encodes a subunit of the MCM2-7 complex(also known as MCM2-MCM7), the replication licensing factor and presumptive replicative helicase.
References	1. Connelly, M. A., Zhang, H., Kieleczawa, J., Anderson, C. W. The promoters for human DNA-PK(cs) (PRKDC) and MCM4: divergently transcribed genes located at chromosome 8 band q11. Genomics 47: 71-83, 1998. 2. Groth, A., Corpet, A., Cook, A. J. L., Roche, D., Bartek, J., Lukas, J., Almouzni, G. Regulation of replication fork progression through histone supply and demand. Science 318: 1928-1931, 2007. 3. Hu B, Burkhart R, Schulte D et al (1994). "The P1 family: a new class of nuclear mammalian proteins related to the yeast Mcm replication proteins". Nucleic Acids Res. 21 (23): 5289-93.

NCBI AND UNIPROT INFORMATION

NCBI GI #	33469919
NCBI GeneID	4173
NCBI Accession #	NP_005905.2
NCBI GenBank Nucleotide #	NM_005914.3
UniProt Accession #	P33991; Q8NEH1; Q99658
Molecular Weight	96,558 Da
NCBI Official Full Name	DNA replication licensing factor MCM4
NCBI Official Synonym Full Names	minichromosome maintenance complex component 4
NCBI Official Symbol	MCM4
NCBI Official Synonym Symbols	NKCD; CDC21; CDC54; NKGCD; hCdc21; P1-CDC21
NCBI Protein Information	DNA replication licensing factor MCM4; CDC21 homolog; minichromosome maintenance deficient 4; homolog of S. pombe cell division cycle 21
UniProt Protein Name	DNA replication licensing factor MCM4
UniProt Gene Name	MCM4
UniProt Synonym Gene Names	CDC21
UniProt Entry Name	MCM4_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/mcm4-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-direct-elisa-elisa/19257>