

Rabbit anti-Mouse, Rat Rad9/Rad9a Polyclonal Antibody | anti-Rad9a antibody

Anti-Rad9/Rad9a Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19288	Rabbit	Mouse, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

Rad9/Rad9a; Polyclonal Antibody; Anti-Rad9/Rad9a Antibody; Cell cycle checkpoint control protein RAD9A; mRAD9; DNA repair exonuclease rad9 homolog A; Rad9-like protein; Rad9a; Rad9; RAD9 checkpoint clamp component A; anti-Rad9a antibody

PRODUCT SPECIFICATIONS

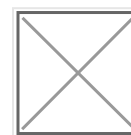
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Rad9/Rad9a detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.01mg NaN ₃ .
Applicable Applications for anti-Rad9a antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA (Direct ELISA)
Application Notes	WB: 0.25-0.5ug/ml Mouse, Rat IHC-P: 0.5-1ug/ml Mouse, Rat FC/FACS/FCM: 1-3ug/1x10 ⁶ cells Mouse Direct ELISA: 0.1-0.5ug/ml Mouse
Immunogen	E Coli-derived mouse Rad9/Rad9a recombinant protein (Position: M1-G389).
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.

IMAGES



FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of HEPA1-6 cells using anti-Rad9/Rad9a antibody (AAA19288). Overlay histogram showing HEPA1-6 cells stained with AAA19288 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Rad9/Rad9a Antibody (AAA19288, 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.



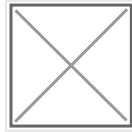
IHC (Immunohistochemistry)

Figure 5. IHC analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (AAA19288). Rad9/Rad9a was detected in paraffin-embedded section of rat spleen 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 1µg/ml rabbit anti-Rad9/Rad9a Antibody (AAA19288) 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).



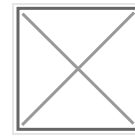
IHC (Immunohistochemistry)

Figure 4. IHC analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (AAA19288).Rad9/Rad9a was detected in paraffin-embedded section of rat cardiac muscle 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 1μg/ml rabbit anti-Rad9/Rad9a Antibody (AAA19288) 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.



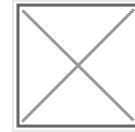
IHC (Immunohistochemistry)

Figure 2. IHC analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (AAA19288).Rad9/Rad9a was detected in paraffin-embedded section of mouse cardiac muscle 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 1μg/ml rabbit anti-Rad9/Rad9a Antibody (AAA19288) 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 Rad9/Rad9a using anti-Rad9/Rad9a antibody (AAA19288).Rad9/Rad9a was detected in paraffin-embedded section of mouse spleen 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 1μg/ml rabbit anti-Rad9/Rad9a Antibody (AAA19288) 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.



WB (Western Blot)

Figure 1. Western blot analysis of Rad9/Rad9a using anti-Rad9/Rad9a antibody (AAA19288).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: mouse spleen tissue lysatesLane 2: rat PC-12 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-Rad9/Rad9a antigen affinity purified polyclonal antibody (Catalog # AAA19288) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # with Tanon 5200 system. A specific band was detected for Rad9/Rad9a at approximately 55-60KD. The expected band size for Rad9/Rad9a is at 42KD.

ADDITIONAL INFORMATION

Related Product Information for anti-Rad9a antibody	This gene product is highly similar to Schizosaccharomyces pombe rad9, a cell cycle checkpoint protein required for cell cycle arrest and DNA damage repair. This protein possesses 3' to 5' exonuclease activity, which may contribute to its role in sensing and repairing DNA damage. It forms a checkpoint protein complex with RAD1 and HUS1. This complex is recruited by checkpoint protein RAD17 to the sites of DNA damage, which is thought to be important for triggering the checkpoint-signaling cascade. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
References	- Lieberman, H. B., Hopkins, K. M., Nass, M., Demetrick, D., Davey, S. A human homolog of the Schizosaccharomyces pombe rad9+ checkpoint control gene. Proc. Nat. Acad. Sci. 93: 13890-13895, 1996. - Maniwa, Y., Yoshimura, M., Bermudez, V. P., Yuki, T., Okada, K., Kanomata, N., Ohbayashi, C., Hayashi, Y., Hurwitz, J., Okita, Y. Accumulation of hRad9 protein in the nuclei of nonsmall cell lung carcinoma cells. Cancer 103: 126-132, 2005. - Volkmer, E., Karnitz, L. M. Human homologs of Schizosaccharomyces pombe Rad1, Hus1, and Rad9 form a DNA damage-responsive protein complex. J. Biol. Chem. 274: 567-570, 1999.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6755282
NCBI GeneID	19367
NCBI Accession #	NP_035367.1
NCBI GenBank Nucleotide #	NM_011237.2
UniProt Accession #	Q9Z0F6; Q8QZZ3
Molecular Weight	42,059 Da
NCBI Official Full Name	cell cycle checkpoint control protein RAD9A

NCBI Official Synonym Full Names	RAD9 homolog A
NCBI Official Symbol	Rad9a
NCBI Official Synonym Symbols	Rad9
NCBI Protein Information	cell cycle checkpoint control protein RAD9A; mRAD9; Rad9-like protein; DNA repair exonuclease rad9 homolog A
UniProt Protein Name	Cell cycle checkpoint control protein RAD9A
UniProt Gene Name	Rad9a
UniProt Synonym Gene Names	Rad9; mRAD9
UniProt Entry Name	RAD9A_MOUSE

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/rad9-rad9a-antibody-western-blot-immunohistochemistry-flow-cytometry-direct-elisa-elisa/19288>