

Rabbit anti-Human RRM1 Polyclonal Antibody | anti-RRM1 antibody

Anti-RRM1 Antibody Picoband

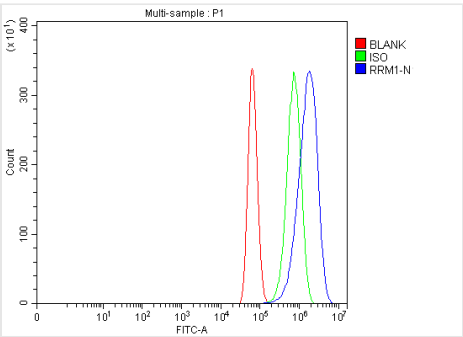
CATALOG # AAA126170	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Flow Cytometry, Functional Assay, Western Blot
-------------------------------	-----------------------	----------------------------	--

PRODUCT SYNONYMS

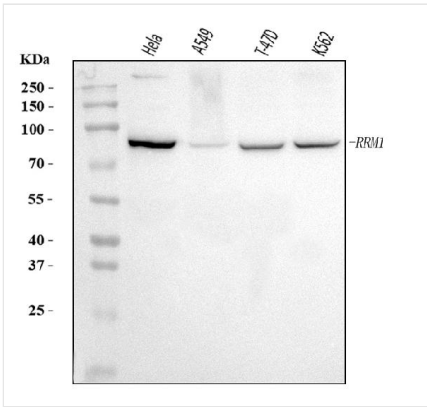
RRM1; Polyclonal Antibody; Anti-RRM1 Antibody Picoband; anti-RRM1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Natural and recombinant Mouse C5
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-RRM1 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Assay Type	Sandwich
Samples	Cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA)
Detection Range	15.6 pg/ml - 1,000 pg/ml
Sensitivity	<10 pg/ml
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Inter-assay Precision	Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of U87 cells using anti-RRM1 antibody (AAA126170).Overlay histogram showing U87 cells stained with AAA126170 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-RRM1 Antibody (AAA126170, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)
Figure 1. Western blot analysis of RRM1 using anti-RRM1 antibody (AAA126170).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 30 ug of sample under reducing conditions.Lane 1: human HeLa whole cell lysates,Lane 2: human A549 whole cell lysates,Lane 3: human T-47D whole cell lysates,Lane 4: human K562 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-RRM1 antigen affinity purified polyclonal antibody (#AAA126170) at 0.5 ug/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 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for RRM1 at approximately 90 kDa. The expected band size for RRM1 is at 90 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-RRM1 antibody	Background: C5a is a protein fragment released from complement component C5. This gene is mapped to 9q33.2. The protein encoded by this gene is the fifth component of complement, which plays an important role in inflammatory and cell killing processes. This protein is comprised of alpha and beta polypeptide chains that are linked by a disulfide bridge. An activation peptide, C5a, which is an anaphylatoxin that possesses potent spasmogenic and chemotactic activity, is derived from the alpha polypeptide via cleavage with a convertase. The C5b macromolecular cleavage product can form a complex with the C6 complement component, and this complex is the basis for formation of the membrane attack complex, which includes additional complement components. Mutations in this gene cause complement component 5 deficiency, a disease where patients show a propensity for severe recurrent infections. Defects in this gene have also been linked to susceptibility to liver fibrosis and to rheumatoid arthritis.
Principle of the Assay: The Quick Picokine™ Mouse C5 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Mouse C5 in cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA). It uses our proprietary Quick ELISA technology. Quick ELISA technology employs capture antibodies conjugated to an affinity tag that is recognized by the polyclonal antibody used to coat our Quick ELISA plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. The kit contains recombinant Mouse C5 with immunogen: Expression system for standard: E.coli; Immunogen sequence: N679-R755. To measure Mouse C5, add standards and samples to the wells, then add antibody cocktail. Wash the wells with PBS or TBS buffer, and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product is linearly proportional to Mouse C5 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Mouse C5 in the sample.	
Product Categories/Family for anti-RRM1 antibody	Primary Antibodies , Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	132608
------------------	------------------------

NCBI GeneID	6240
UniProt Accession #	P23921; Q9UNN2
Molecular Weight	792
NCBI Official Full Name	Ribonucleoside-diphosphate reductase large subunit
NCBI Official Synonym Full Names	ribonucleotide reductase M1
NCBI Official Symbol	RRM1
NCBI Official Synonym Symbols	R1; RR1; RIR1
NCBI Protein Information	ribonucleoside-diphosphate reductase large subunit; ribonucleotide reductase, R1 subunit; ribonucleotide reductase M1 polypeptide; ribonucleoside-diphosphate reductase subunit M1
UniProt Protein Name	Ribonucleoside-diphosphate reductase large subunit
UniProt Gene Name	RRM1
UniProt Synonym Gene Names	RR1
UniProt Entry Name	RIR1_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/rrm1-antibody-flow-cytometry-western-blot-elisa/126170>