

Rabbit anti-Mouse C5a-R/C5ar1 Polyclonal Antibody | anti-C5ar1 antibody

Anti-C5a-R/C5ar1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125628	Rabbit	Mouse	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

C5a-R/C5ar1; Polyclonal Antibody; Anti-C5a-R/C5ar1 Antibody; C5ar1; C5ar; C5r1; C5a anaphylatoxin chemotactic receptor 1; C5a anaphylatoxin chemotactic receptor; C5a-R; C5aR; CD antigen CD88; complement component 5a receptor 1; anti-C5ar1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for C5a-R/C5ar1 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-C5ar1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived mouse C5a-R/C5ar1 recombinant protein (Position: H29-D327).
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/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of RAW264.7 cells using anti-C5a-R/C5ar1 antibody (AAA125628). Overlay histogram showing RAW264.7 cells stained with AAA125628 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-C5a-R/C5ar1 Antibody (AAA125628, 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 2. IF analysis of C5a-R/C5ar1 using anti-C5a-R/C5ar1 antibody (AAA125628). C5a-R/C5ar1 was detected in immunocytochemical section of HEPa1-6 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-C5a-R/C5ar1 Antibody (AAA125628) overnight at 4 degree C. DyLight[®]550 Conjugated Goat Anti-Rabbit IgG (BA1135) 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.



WB (Western Blot)

Figure 1. Western blot analysis of C5a-R/C5ar1 using anti-C5a-R/C5ar1 antibody (AAA125628). 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 lysates Lane 2: mouse thymus tissue 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-C5a-R/C5ar1 antigen affinity purified polyclonal antibody (Catalog # AAA125628) at 0.5 μ g/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 with Tanon 5200 system. A specific band was detected for C5a-R/C5ar1 at approximately 43KD. The expected band size for C5a-R/C5ar1 is at 43KD.

ADDITIONAL INFORMATION

Related Product Information for anti-C5ar1 antibody	The C5a receptor also known as complement component 5a receptor 1 (C5AR1) or CD88 (Cluster of Differentiation 88) is a G protein-coupled receptor for C5a. It functions as a complement receptor. C5a receptor modulates inflammatory responses, obesity, development and cancers.
References	- Arbore, G., West, E. E., Spolski, R., Robertson, A. A. B., Klos, A., Rheinheimer, C., Dutow, P., Woodruff, T. M., Yu, Z. X., O'Neill, L. A., Coll, R. C., Sher, A., and 10 others. T helper 1 immunity requires complement-driven NLRP3 inflammasome activity in CD4+ T cells. <i>Science</i> 352: aad1210, 2016 - Atkinson, J. P. Complement system on the attack in autoimmunity. (Commentary) <i>J. Clin. Invest.</i> 112: 1639-1641, 2003. - Bao, L., Gerard, N. P., Eddy, R. L., Jr., Shows, T. B., Gerard, C. Mapping of genes for the human C5a receptor (C5AR), human FMLP receptor (FPR), and two FMLP receptor homologue orphan receptors (FPRH1, FPRH2) to chromosome 19. <i>Genomics</i> 13: 437-440, 1992.

NCBI AND UNIPROT INFORMATION

NCBI GI #	291167769
NCBI GeneID	12273
NCBI Accession #	NP_001167021.1
NCBI GenBank Nucleotide #	NM_001173550.1
UniProt Accession #	P30993; Q3TZ86
Molecular Weight	39,023 Da
NCBI Official Full Name	C5a anaphylatoxin chemotactic receptor 1
NCBI Official Synonym Full Names	complement component 5a receptor 1
NCBI Official Symbol	C5ar1
NCBI Official Synonym Symbols	C5aR; C5r1; Cd88; D7Msu1
NCBI Protein Information	C5a anaphylatoxin chemotactic receptor 1; C5a anaphylatoxin receptor; C5a ligand; C5a-R; complement component 5, receptor 1
UniProt Protein Name	C5a anaphylatoxin chemotactic receptor 1
UniProt Gene Name	C5ar1
UniProt Synonym Gene Names	C5ar; C5r1; C5a-R; C5aR
UniProt Entry Name	C5AR1_MOUSE

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AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/c5a-r-c5ar1-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/125628>