

**C3a Receptor Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP58066****Specification**

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**C3a Receptor Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	<a href="#">Q16581</a>
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human C3a Receptor/C3aR
Epitope Specificity	401-482/482
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Multi-pass membrane protein.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family.
Post-translational modifications	Among the sulfation sites Tyr-174 is essential for binding of C3a anaphylatoxin.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

Complement C3 precursor contains complement C3 beta chain, complement C3 alpha chain, C3a anaphylatoxin, complement C3b alpha chain, complement C3c fragment, complement C3dg fragment, complement C3g fragment, complement C3d fragment and complement C3f fragment. C3a, C4a, and C5a are potent anaphylatoxins that are released during complement activation, a system of ligand-surface protein interactions specific to cells of hematopoietic lineage that aids in the elimination of pathogens. C3a and C5a secretion correlates with pathophysiological phenotypes such as asthma and bacterial meningitis. Binding of these proteins to their respective G protein-coupled receptors (C3aR, C5aR), which are present on the surface of myeloid leukocytes, induces proinflammatory events such as cellular degranulation, smooth muscle contraction, arachidonic acid metabolism, cytokine release, leukocyte activation and cellular chemotaxis. C3aR is expressed in brain and activated B-lymphocytes whereas C5aR is prevalent on the surface of hepatocyte, lung, smooth muscle, and endothelial cells. Upon activation, C3aR and C5aR are susceptible to rapid GRK-mediated phosphorylation and clathrin-coated vesicle targeting. C5aR utilizes the Ras-Raf-ERK1/2 cascade and couples to Gi/G16 proteins.

**C3a Receptor Polyclonal Antibody - Additional Information**

**Gene ID 719****Other Names**

C3a anaphylatoxin chemotactic receptor, C3AR, C3a-R, C3AR1, AZ3B, C3R1, HNFAG09

**Target/Specificity**

Widely expressed in several differentiated hematopoietic cell lines, in the lung, spleen, ovary, placenta, small intestine, throughout the brain, heart, and endothelial cells. Mostly expressed in lymphoid tissues.

**Dilution**

WB~1:1000  
IHC-P~N/A  
IHC-F~N/A  
IF~1:50~200  
E~N/A

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**C3a Receptor Polyclonal Antibody - Protein Information**

**Name** C3AR1

**Synonyms** AZ3B, C3R1, HNFAG09

**Function**

Receptor for the chemotactic and inflammatory peptide anaphylatoxin C3a. This receptor stimulates chemotaxis, granule enzyme release and superoxide anion production.

**Cellular Location**

Cell membrane; Multi-pass membrane protein.

**Tissue Location**

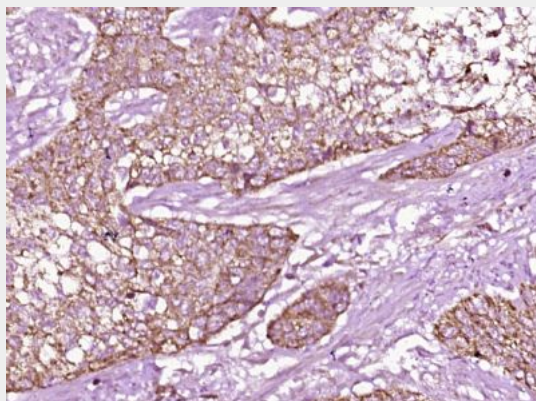
Widely expressed in several differentiated hematopoietic cell lines, in the lung, spleen, ovary, placenta, small intestine, throughout the brain, heart, and endothelial cells. Mostly expressed in lymphoid tissues

**C3a Receptor Polyclonal Antibody - Protocols**

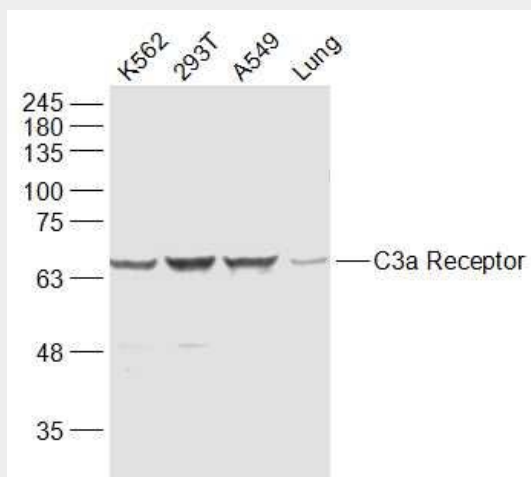
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## C3a Receptor Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (human gastric carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (C3a Receptor) Polyclonal Antibody, Unconjugated (bs-2955R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



### Sample:

K562(Human) Cell Lysate at 30 ug

293T(Human) Cell Lysate at 30 ug

A549(Human) Cell Lysate at 30 ug

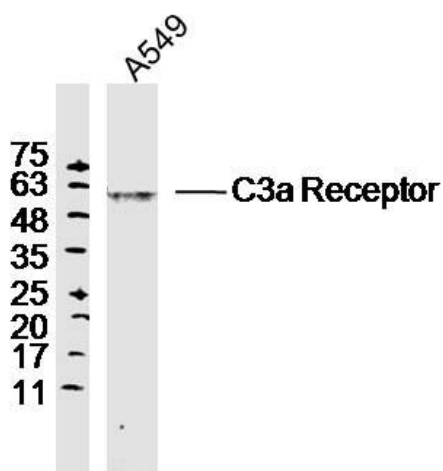
Lung (Mouse) Lysate at 40 ug

Primary: Anti-C3a Receptor (bs-2955R) at 1/1000 dilution

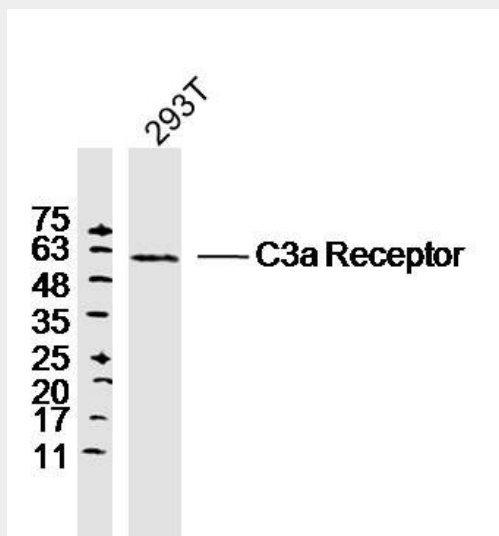
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 54 kD

Observed band size: 64 kD



Sample: A549 Cell (Human) Lysate at 30 ug  
Primary: Anti-C3a Receptor (bs-2955R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 54kD  
Observed band size: 60kD



Sample: 293T Cell (Human) Lysate at 30 ug  
Primary: Anti-C3a Receptor (bs-2955R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 54kD  
Observed band size: 60kD