## For Research Use Only

# C5aR Polyclonal antibody

Catalog Number:21316-1-AP

**Featured Product** 

27 Publications

BC008982

GeneID (NCBI):

**UNIPROT ID:** 

Full Name:

Calculated MW:

350 aa, 39 kDa

P21730

GenBank Accession Number:

complement component 5a receptor 1



**Basic Information** 

Catalog Number: 21316-1-AP

Size: 500 μg/ml Source: Rabbit

Isotype:

Immunogen Catalog Number:

AG15968

Observed MW: 45 kDa

**Applications** 

**Tested Applications:** 

FC, IF/ICC, IHC, WB, ELISA

Cited Applications: FC, IF, IHC, WB

Species Specificity: human

**Cited Species:** human, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:3000 IHC 1:200-1:800 IF 1:10-1:100

Positive Controls:

WB: LO2 cells, PC-3 cells, U-937 cells

IHC: human tonsillitis tissue, human lung tissue,

human liver tissue IF: HepG2 cells,

# **Background Information**

C5aR, also named as CD88, is a G protein-coupled receptor for the anaphylatoxin C5a, a cleavage product of the complement cascade. The C5a ligand is a proinflammatory component of host defense. C5aR is activated upon binding of the C5a molecule. Receptor activation stimulates chemotaxis, granule enzyme release, intracellular calcium release and superoxide anion production. The deduced sequence of C5aR contains 350 amino acids, giving a calculated molecular weight of 39 kDa. C5aR has an N-linked glycosylation site in the N-terminal extracellular domain. The apparent molecular weight of C5aR is about 40-52 kDa (PMID: 1847994; 9136907; 9136907; 2007135).

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Shi-Tao He	34670452	J Invest Surg	WB
Kun Zhang	31695787	Theranostics	WB
Duo Xu	36192575	Clin Transl Oncol	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

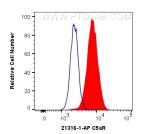
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

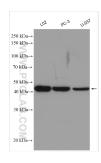
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

### **Selected Validation Data**



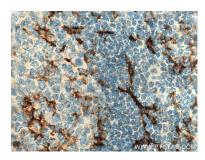
1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human C5aR (21316-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



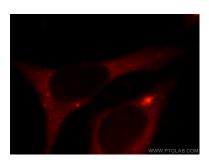
Various lysates were subjected to SDS PAGE followed by western blot with 21316-1-AP (C5aR antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 21316-1-AP (C5aR antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 21316-1-AP (C5aR antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HepG2 cells, using C5AR1 antibody 21316-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).