For Research Use Only

C3/C3b/C3c Polyclonal antibody

Catalog Number:21337-1-AP

Featured Product

93 Publications



Basic Information

Catalog Number: 21337-1-AP Concentration:

700 ug/ml

Source: Rabbit Isotype:

Immunogen Catalog Number:

AG15537

GenBank Accession Number:

BC150179 GeneID (NCBI):

UNIPROT ID:

P01024 Full Name:

complement component 3

Calculated MW: 1663 aa, 187 kDa

Observed MW: 115 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC: 1:1000-1:4000 IF-P: 1:50-1:500 IF/ICC: 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IP, ELISA

Cited Applications: WB, IHC, IF, CoIP Species Specificity: human, rat

Cited Species: human, mouse, rat, pig, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: rat plasma, human plasma IP: human plasma tissue,

IHC: human liver tissue, human liver cancer tissue

IF-P: human liver cancer tissue,

IF/ICC: HeLa cells,

Background Information

The complement system is an important effector that bridges the innate and adaptive immune systems (PMID: 20010915). The third component of complement, C3, plays a central role in activating the complement system. Its processing by C3 convertase is the central reaction in both classical and alternative complement pathways (PMID: 11414361). Human C3, composed of α and β chains (115-120 and 75 kDa, respectively), is cleaved into C3a and C3b by C3 convertase. C3b is composed of the $\,\alpha$ ' chain and $\,\beta\,$ chain (PMID: 27210597). Factor I cleaves the $\,\alpha\,$ chain of C3b to 68 kDa and 43 kDa degradation products (iC3b) (PMID: 25395424; 14527961). This antibody raised against 1314-1663 aa of human C3 protein recognizes the C3 a chain (115-120 kDa), C3b a chain (110-115 kDa), and C3c α 'chain fragment 2 (43 kDa).

Notable Publications

Author	Pubmed ID	Journal	Application
Jing-Yi Hou	36126455	Biomed Pharmacother	IF
Xiao Zhai	34496892	J Nanobiotechnology	IF
Ruonan Gao	36306990	Free Radic Biol Med	IF,WB

Storage

Storage:

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

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

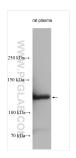
Aliquoting is unnecessary for -20°C storage

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

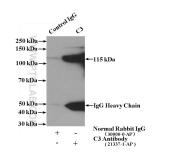
T: 4006900926 E: Proteintech-CN@ptglab.com

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

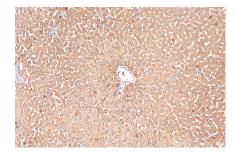
Selected Validation Data



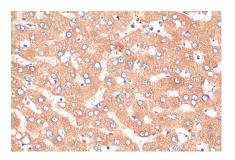
rat plasma was subjected to SDS PAGE followed by western blot with 21337-1-AP (C3/C3b/C3c antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



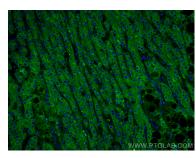
IP result of anti-C3/C3b/C3c (IP:21337-1-AP, 4ug; Detection:21337-1-AP 1:1000) with human plasma lysate 4000 ug.



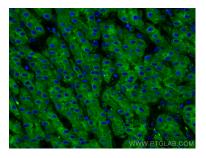
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 21337-1-AP (C3/C3b/C3c antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



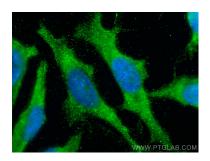
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 21337-1-AP (C3/C3b/C3c antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using C3/C3b/C3c antibody (21337-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using C3/C3b/C3c antibody (21337-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using C3/C3b/C3c antibody (21337-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).