



# Complement Research

**Innate Immunity** · Acute phase proteins · Western blot · Antimicrobial peptides · **Complement Research** · LPS, Microbial toxins · Flow cytometry · Scavenger receptors · TLR · **Assays** · Inflammation · Adhesion molecules · Immunohistochemistry · Coagulation molecules · Cytokines · Chemokines · **Antibodies** · Cell & Tissue damage · Functional studies · Lipid binding proteins · Immunoprecipitation · Oxidative stress · Organ & Tissue related research · **Proteins** · Mouse mAb isotyping kits



## General introduction

Hycult Biotech develops, produces and markets antibodies, antibody based products and more specifically immunoassays for innate immunity and directly related fields, with an emphasis on complement, neutrophil proteins, TLR, scavenger receptors and acute phase proteins. Furthermore, we have a strong interest in progressing research in the area of inflammation and cell damage caused by pathogens or oxidation factors.

## Complement

The complement system is not only central to innate immune responses but is also a dominant player in adaptive immunity. Damage-associated molecular patterns (DAMPs) are translated into cellular responses through interaction with specific receptors on distinct cells. Among these are pattern-recognition receptors (PRRs) which identify pathogen associated molecular patterns (PAMPs) and endogenous danger signals, e.g. apoptosis related membrane fragments. Complement components like C1q, C3 and the collectin mannose-binding lectin (MBL) are essential soluble danger sensing proteins that are activated by both endogenous and exogenous stimuli.

The most recent additions to our complement portfolio are the C3c and gC1qR. C3c for example is a stable complement biomarker that appears in the fluid phase only, without any interference of other C3 based products. This underlines the fact that we are a dedicated partner in complement research.

In this Product Leaflet the following abbreviations for the applications have been used:

- FC:** Flow Cytometry
- FS:** Functional studies
- IA:** Immunoassays
- IF:** Immunofluorescence
- IHC:** Immunohistochemistry
- F:** Frozen sections
- P:** Paraffin sections
- IP:** Immunoprecipitation
- W:** Western Blot

More information about products within the field of Innate Immunity, Antimicrobial peptides, Microbial toxins, TLR, Inflammation, Cell & Tissue damage, Lipid binding proteins and Oxidative stress can be found on our website. Please feel free to subscribe to our newsletter to remain up-to-date on Hycult Biotech's product information!

With its headquarters in the Netherlands and a sales office in the USA, Hycult Biotech has a distribution network with over 45 distributors all over the world. We believe technical support is essential when using our products or when looking into buying them for your research needs. For this you can always contact our dedicated support team directly on [support@hycultbiotech.com](mailto:support@hycultbiotech.com).

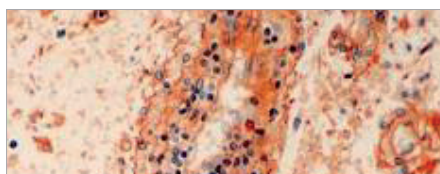
## Assays

### Human

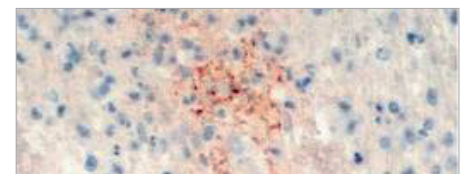
Product name	Quantity	Cat.#
C1q	1 x 96 det.	HK356
C3a	1 x 96 det.	HK354
C3c	1 x 96 det.	HK368
C5a	1 x 96 det.	HK349
Complement factor D	1 x 96 det.	HK343
Complement factor H	1 x 96 det.	HK342
Complement factor H, CE IVD	1 x 96 det.	DH003
Factor H, 402H/Y variant detection	1 x 96 det.	HK353
Ficolin-1	1 x 96 det.	HK357
Ficolin-2	1 x 96 det.	HK336
Ficolin-3	1 x 96 det.	HK340
gC1qR	1 x 96 det.	HK362
MAp44	1 x 96 det.	HK359
MASP-2	1 x 96 det.	HK326
MASP-3	1 x 96 det.	HK339
MBL	1 x 96 det.	HK323
MBL, CE IVD	1 x 96 det.	DH001
Properdin	1 x 96 det.	HK334
SP-D	1 x 96 det.	HK335
TCC	1 x 96 det.	HK328

### Mouse, rat and pig

Product name	Quantity	Cat.#
Alternative Complement Pathway, Rat	1 x 96 det.	HIT412
C1q, Mouse	1 x 96 det.	HK211
C5a, Pig	1 x 96 det.	HK701
Classical Complement Pathway, Rat	1 x 96 det.	HIT410
Complement Pathway, Rat (HK410, 411 & 412)	3 x 96 det.	HIT413
Lectin Complement Pathway, Rat	1 x 96 det.	HIT411
MBL-A, Mouse	1 x 96 det.	HK208
MBL-C, Mouse	1 x 96 det.	HK209
TCC, Rat	1 x 96 det.	HK106



C6 in human brain tissue. Staining of paraffin section with monoclonal antibody WU 6-4 (Cat.# HM2276)



C9 neoantigen in human brain tissue. Staining of paraffin section with monoclonal antibody WU 13-15 (Cat.# HM2264)

## Antibodies All antibodies have a quantity of 100 µg unless indicated otherwise

Human				Mouse			
Product name	Clone name	Applications	Cat.#	Product name	Clone name	Applications	Cat.#
Activated C1s	M241	FC F FS IA IP P W	HM2109	C1q	7H8	F IA IP	HM1044
Activated C3	bH6	F IA P	HM2168	C1q	JL-1	F FS IA IF W	HM1096
Activated C3	I3/15	IA W	HM2257	C3	11H9	FC F IA IF IP W	HM1045
C1s	M81	FC F FS IA IP P W	HM2108	C3	pAb	F W	HP8012
C3/C3a	2898	IA W	HM2075	C3a	3/11	FC FS IA W	HM1072
C3/C3a	474	IA W	HM2073	C3aR	14D4	FC F	HM1123
C3/C3b	755	IA W	HM2072	C3b/iC3b/C3c	2/11	FC F FS IA IF W	HM1065
C3a/C3a des Arg	2991	IA W	HM2074	C3b/iC3b/C3c	3/26	FC F FS IA IF W	HM1078
C3aR	17	FC F	HM2195	C4	16D2	FC F IA IF IP W	HM1046
C3b/iC3b/C3d	1H8	FC IP W	HM2287	C4d	pAb	FC F P W	HP8033
C3c	4	IP	HM2200	C5	BB5.1	F FS IA IP P	HM1073
C3c	F1-4	IA IP W	HM2318	C5	pAb	W	HP8013
C3d	3	IA IP	HM2198	C5aR	10/92	FC F W	HM1077
C3g	9	IA IP	HM2199	C5aR	20/70	FC FS IF	HM1076
C4d	7H4	F IA W	HM2230	C5L2	pAb	FS	HP8015
C4d	12D11	F IA W	HM2229	C6	pAb	F W	HP8014
C5/C5a	557	FS IA W	HM2077	C9	C9-6-25-5	W	HM1134
C5/C5a	561	FS IA	HM2076	CD46	MM10	FC F IA IF W	HM1118
C5/C5b	568	IA W	HM2080	CD59a	7A6	FC F FS IA IF W	HM1116
C5a/C5a des Arg	2942	F FS IA W	HM2078	CR1/CR2	7E9	FC IF IP W	HM1112
C5a/C5a des Arg	2952	FS IA W	HM2079	Crry/p65	8A/E6	IA	HM1117
C5aR	S5/1	FC F FS P W	HM2094	DAF	3D5	FC W	HM1115
C5aR	W17/1	FC F P	HM2095	Factor H	1A2	F IA W	HM1119
C5L2	pAb	FC F IF W	HP9036	MBL-A	2B4	IA W	HM1036
C6	WU 6-4	FC FS IA IF IP P W	HM2276	MBL-A	8G6	F IA IF W	HM1035
C7	WU 4-15	FC IA IF IP W	HM2277	MBL-C	14D12	F IA IF W	HM1038
C9	X197	FC F FS IA P W	HM2111	MBL-C	16A8	IA W	HM1037
C9 neoantigen	WU 13-15	FC F IA P W	HM2264				
CD11b	Bear-1	FC F IP	HM2125				
CD35 (C1R)	31R	FC F IA IP P W	HM2107				
CD46	M177	FC FS IA IP W	HM2103				
CD59	MEM-43	W	HM2120				
CFHR1-2	JHD-7.10.1	IA W	HM2301				
Coagulation factor XII	10-11-37	IA W	HM2322				
Complement factor B/Ba	M20/6	IA IP W	HM2255				
Complement factor B/Ba	P21/15	IA IP W	HM2254				
Complement factor B/Bb	M13/12	IA IP W	HM2256				
Complement factor D	D10/4	IA	HM2258				
Complement factor D	I8/1	IA	HM2259				
Complement factor H	C18/3	IA W	HM2248				
Complement factor H	L20/3	W	HM2249				
Complement factor I	MBI-1	IA W	HM2319				
DAF	I1C6	FC FS IA W	HM2280				
DAF	D17	FC W	HM2105				
Ficolin-1	7G1	FC IA W	HM2196				
Ficolin-1 (50 µg)	pAb	FC IF W	HP9039				
Ficolin-2	GN4	IA IP	HM2090				
Ficolin-2	GN5	IA IP W	HM2091				
Ficolin-3	4H5	IP	HM2089				
gC1qR	60.11	FC FS IA IP W	HM2014				
gC1qR	74.5.2	FC FS IA IP W	HM2015				
MAP44	2D5B6	IA IP P W	HM2296				
MASP-1	4H2A9	IA	HM2297				
MASP-1/3	1E2	IA IP W	HM2092				
MASP-1/3	2B11	IA IP W	HM2093				
MASP-2	8B5	IA W	HM2190				
MASP-2/MAP19	6G12	IA W	HM2191				
MASP-3	38:12-3	IA W	HM2216				
MBL	3E7	FC IA W	HM2061				
MBL	D8.18	FC IA W	HM2081				
Pro SP-C	pAb	F P W	HP9050				
Properdin	2.9	IA	HM2282				
Properdin	SIM 295-9.3.4	FC F IA W	HM2283				
SP-B	pAb	F P W	HP9049				
TCC	aE11	FS IA IF P	HM2167				

Rat			
Product name	Clone name	Applications	Cat.#
C1q	pAb	F IA IP	HP8021
C3	pAb	IA W	HP8022
C3/C3b	2B10B9B2	IA W	HM3031
C3aR	74	FC F	HM3028
C4	pAb	IA IP	HP8023
C4d	pAb	FC F P W	HP8034
C5aR	R63	FC F IF W	HM3017
C5b-9	2A1	FC F IA IF P W	HM3033
C5L2	pAb	FC FS	HP8018
C6	3G11	F IA W	HM3034
CD46	MM1	F IA IF W	HM3038
CD59 Glycoprotein	TH9	FC F FS W	HM3037
Crry	TLD-1C11	FC F FS IF W	HM3032
DAF	RDII-24	FC F FS IA IP W	HM3036
DAF	RDIII-7	FC F FS IF W	HM3035
SP-D	IIH3	IA P W	HM3022
SP-D	IVG8	IA P W	HM3024
SP-D	VIF9	IA P W	HM3023

Pig			
Product name	Clone name	Applications	Cat.#
DAF	PD2	FC FS IA W	HM4014
SP-B	pAb	IA W	HP7002

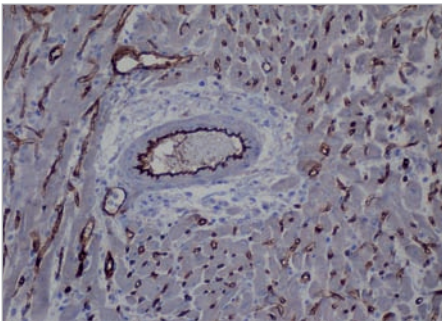
## Proteins/peptides

### Human

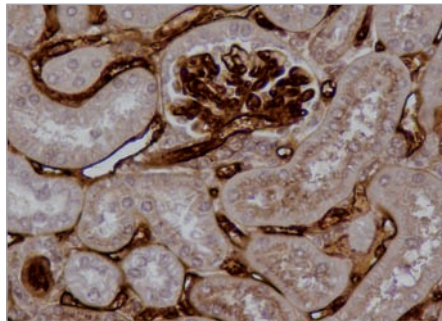
Product name	Quantity	Cat.#
C1, Natural	200 µg	HC2122
C1q, Natural	1 mg	HC2123
C2, Natural	50 µg	HC2124
C3, Natural	250 µg	HC2125
C3a des Arg, Natural	50 µg	HC2127
C3a, Natural	50 µg	HC2126
C4, Natural	250 µg	HC2128
C5a des Arg, Recombinant	50 µg	HC2102
C5a, Recombinant	50 µg	HC2101
C5L2, Peptide	10 µg	HC2103
Complement factor B, Natural	250 µg	HC2129
Complement factor H, Natural	250 µg	HC2130
Complement factor I, Natural	100 µg	HC2131
Properdin, Human, Natural	100 µg	HC2132

### Mouse and rat

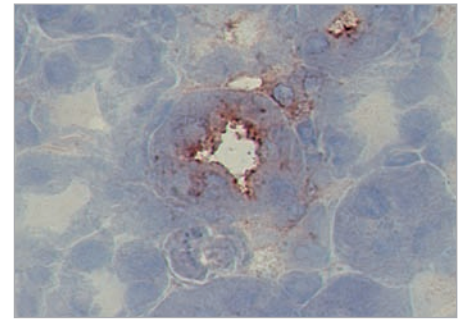
Product name	Quantity	Cat.#
C5a des Arg, Mouse, Recombinant	50 µg	HC1102
C5a, Mouse, Recombinant	50 µg	HC1101
C5L2, Mouse, Peptide	10 µg	HC1103
C5L2, Rat, Peptide	10 µg	HC3103



C4d in rat heart transplant. Staining of paraffin section with antibody to rat C4d (Cat.# HP8034).



C4d in mouse kidney transplant. Staining of paraffin section with antibody to mouse C4d (Cat.# HP8033).



Tubular MBL-C deposition in mouse kidney subjected to ischemia and reperfusion. Immunohistochemical staining on frozen section with antibody 14D12 (Cat.# HM1038).

### Why scientists buy our products:

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