

## Human C3a Antibody Pair Set

Catalog No. E-KAB-0489

Applications

ELISA

Synonyms C3a-desArg;ASP

### Kit components & Storage

Title	Specifications	Storage
Human C3a Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze/thaw cycles.
Human C3a Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze/thaw cycles.

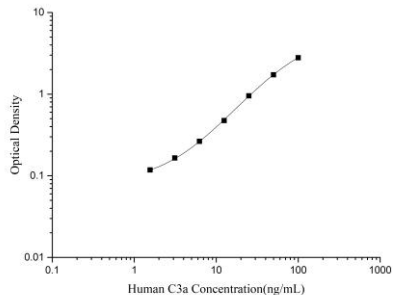
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

Items		Characteristic (E-KAB-0489)	
		Human C3a Capture Antibody	Human C3a Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human C3a protien	Recombinant Human C3a protien
	Swissprot	P01024	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	Conjugation	Unconjugated	Biotin
	Concentration	0.5 mg/mL	/
	Buffer	PBS with 0.04% Proclin 300; 50% glycerol; pH 7.5	PBS with 0.04% Proclin 300; 1% protective protein; 50% glycerol; pH 7.5
	Purify	Protein A or G	Protein A or G
	Specificity	Detects Human C3a in ELISAs.	

## Applications

### Human C3a Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																				
ELISA Capture	0.5-4 µg/mL	Human C3a Capture Antibody	 <p>The graph displays a standard curve for the Human C3a Sandwich ELISA Assay. The x-axis represents Human C3a Concentration in ng/mL on a logarithmic scale from 0.1 to 1000. The y-axis represents Optical Density on a logarithmic scale from 0.01 to 10. The data points form a smooth, upward-sloping curve, indicating a positive correlation between the concentration of Human C3a and the resulting optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human C3a Concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr><td>1</td><td>0.1</td></tr> <tr><td>2</td><td>0.15</td></tr> <tr><td>5</td><td>0.25</td></tr> <tr><td>10</td><td>0.4</td></tr> <tr><td>20</td><td>0.7</td></tr> <tr><td>50</td><td>1.2</td></tr> <tr><td>100</td><td>2.0</td></tr> <tr><td>200</td><td>3.5</td></tr> <tr><td>500</td><td>6.0</td></tr> </tbody> </table>	Human C3a Concentration (ng/mL)	Optical Density	1	0.1	2	0.15	5	0.25	10	0.4	20	0.7	50	1.2	100	2.0	200	3.5	500	6.0
Human C3a Concentration (ng/mL)	Optical Density																						
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ELISA Detection	1:1000-1:10000	Human C3a Detection Antibody (Biotin)																					

**Note:** This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

## Background

Complement component C3 plays a central role in the activation of complement system. Its activation is required for both classical and alternative complement activation pathways. The encoded preproprotein is proteolytically processed to generate alpha and beta subunits that form the mature protein, which is then further processed to generate numerous peptide products. The C3a peptide, also known as the C3a anaphylatoxin, modulates inflammation and possesses antimicrobial activity. Mutations in this gene are associated with atypical hemolytic uremic syndrome and age-related macular degeneration in human patients.