

Technical Data Sheet

Biotin Rat Anti-Mouse C3a

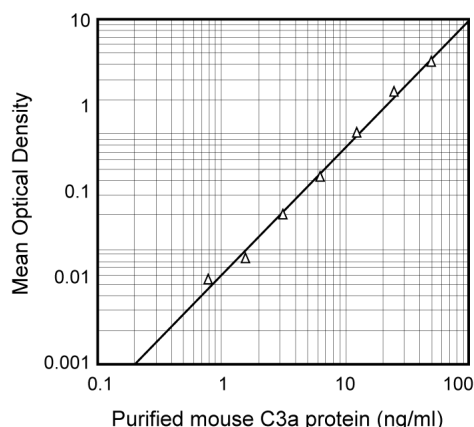
Product Information

Material Number:	558251
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	I87-419
Isotype:	Rat IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The I87-419 antibody reacts with the mouse C3a protein. Anaphylatoxin C3a is a bioactive cleavage product released from plasma component C3 during complement activation and is involved in mediation of a variety of cellular immune responses, as well as being a potent pro-inflammatory agent. The release of this cleavage product is a reliable indicator of in vivo or in vitro complement activation.

This antibody is routinely tested by ELISA Detection. Other applications were tested by BD Biosciences Pharmingen during antibody development only or reported in the literature.



Representative Mouse C3a standard curve. The curve was generated by a sandwich ELISA using the purified I87-1162 antibody as capture antibody, doubling dilutions of purified mouse C3a protein as standard, and biotinylated I87-419 antibody as detection antibody. The standard curve is displayed as the concentration of purified mouse C3a in ng/ml versus the microwell absorbance.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

ELISA Detection	Routinely Tested
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Recommended Assay Procedure:

The biotinylated I87-419 antibody (Cat. No. 558251) is useful as a detector antibody for a sandwich ELISA that measures mouse C3a protein levels. Purified I87-1162 as capture antibody (Cat. No. 558250) can be paired with the biotinylated I87-419 anti-mouse C3a as the detection antibody, using purified mouse C3a protein as standard (Cat. No. 558618). The biotinylated I87-419 antibody should be titrated between 0.25-2 μ g/ml to determine its optimal ELISA detection concentration. To obtain linear standard curves, doubling dilutions of purified mouse C3a protein ranging from 781 pg/ml to 50 ng/ml are recommended for inclusion in each ELISA plate. Addition of FUT-175 (Futhan) to plasma samples at the time of sample collection provides additional protection from ex-vivo activation, and therefore ensures more accurate measurements that reflect the circulating levels of complement activation products. For specific methodology, see Chapter 7: ELISA for specifically measuring the levels of cytokines, chemokines, and inflammatory mediators and their receptors. 2003. Techniques for Immune Function Analysis Application Handbook

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1st Edition. BD Biosciences, which is posted on the website: www.bdbiosciences.com. For this ELISA antibody pair, no cross-reactivity has been observed with the following: recombinant mouse C5a, native human C3a, C4a and C5a, and rat C5a. This ELISA antibody pair shows a limited cross-reactivity with rat C3a.

Suggested Companion Products

Catalog Number	Name	Size	Clone
558250	Purified Rat Anti-Mouse C3a	0.1 mg	187-1162
558618	Purified Mouse C3a Protein (native)	10 tests	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Ember J.A, Jagels M.A., Hugli T.E. Characterization of complement anaphylatoxins and their biologic responses. In: Volenakis JE and Frank MM, ed. *The human complement system in health and disease*. New York: Marcel Dekker Inc; 1998:241-284.(Biology)

Hugli T.E. Structure and function of the anaphylatoxins. *Springer Semin Immunopathol*. 1984; 7:193-219.(Biology)

Hugli T.E. Structure and function of C3a anaphylatoxin. *Curr Top Microbiol Immunol*. 1990; 153:181-208.(Biology)

Volanakis J.E. Overview of the complement system. In: Volenakis JE and Frank MM, ed. *The human complement system in health and disease*. New York: Marcel Dekker Inc; 1998:9-32.(Biology)

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