

Product datasheet for **AM26209PU-N**

Complement C3 (C3) Rat Monoclonal Antibody [Clone ID: 3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	3
Applications:	ELISA, IP
Recommended Dilution:	Immunoassay. Immunoprecipitation.
Reactivity:	Human
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	The monoclonal antibody 3 reacts with a linear determinant in C3d. This 'D' antigen is found on C3, C3b, iC3b, C3dg and C3d. It does not recognize C3c. To distinguish C3 from C3b an anti-C3a antibody is necessary.
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin Preservative: 0.02% sodium azide
Concentration:	lot specific
Purification:	Protein G
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.
Gene Name:	complement component 3
Database Link:	Entrez Gene 718 Human P01024



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Background:

The complement system is an important factor in innate immunity. The third complement component, C3, is central to the classical, alternative and lectin pathways of complement activation. Activation products of the complement cascade contain neo-epitopes that are not present in the individual native components.

The synthesis of C3 is tissue-specific and is modulated in response to a variety of stimulatory agents. C3 is the most abundant protein of the complement system with serum protein levels of about 1.3 mg/ml. An inherited deficiency of C3 predisposes the person to frequent bacterial infections. C3 fragments are deposited in tissues at sites of antibody-mediated immunopathology. In ulcerative colitis and idiopathic chronic inflammatory bowel disease, the deposition of C3 in the diseased mucosa has been reported.

Proteolysis by C3-convertases results in the cleavage of C3 into C3a and C3b. C3b becomes attached to immune complexes and is further cleaved into iC3b and C3f. iC3b is further processed into C3c and C3dg. C3dg can be cleaved into C3d and C3g, though this does not occur in plasma.

Synonyms:

CPAMD1, Complement component 3