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## AM26225PU-N Monoclonal Antibody to Complement C9 - Purified

Alternate names: Complement 9, Complement component C9

Quantity: 0.1 mg
Concentration: 0.1 mg/ml

**Background:** The three distinct activation pathways of complement converge with the formation of

a C5 convertase. The cleavage of C5 by this convertase initiates the lytic or terminal pathway. In contrast to the activation pathways, which require enzymatic cleavage for activation, the terminal pathway relies on conformational changes induced by binding. Binding of C6 facilitates binding of C7 which alters the conformation of the complex. After binding of C8, a variable number of C9 molecules associate with the C5b678 complex, which is also termed the terminal complement complex (TCC). The formation of TCC causes lysis of cells or can trigger a variety of cellular metabolic pathways resulting in the synthesis and release of inflammatory mediators. The TCC contains neoantigens that are absent from the individual native components. C9 neoantigens are present both in the membrane-bound (MAC) and the fluid-phase (SC5b-9) complex. TCC is present in normal human plasma and increased in patients

with complement activation.

 Uniprot ID:
 P02748

 NCBI:
 9606

 GeneID:
 735

Host / Isotype: Mouse / IgG2a Recommended Isotype AM03096PU-N

**Controls:** 

Clone: aE11

**Format:** State: Liquid 0.2 μm filtered Ig fraction

**Purification:** Protein G Chromatography

Buffer System: PBS Stabilizers: 0.1% BSA

Applications: Immunohistochemistry on Frozen Sections (Ref. 6):

The typical starting working dilution is 1/50.

Immunohistochemistry on Paraffin Sections (Ref. 4):

The typical starting working dilution is 1/50.

Flow Cytometry (Ref.5): The typical starting working dilution is 1/50.

Functional Studies (Ref.3,5): Inhibits platelet activation by antiphospholipid antibody

serum (Ref.5).

Immunoassays (Ref.1,2). Immunofluorescence (Ref.2,4).

**Positive Control:** Mucosa from patients with H. Pylori.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.



## AM26225PU-N: Monoclonal Antibody to Complement C9 - Purified

**Specificity:** This antibody reacts with a C9 neoantigen of the terminal complement complex (TCC).

**Species Reactivity:** Tested: Human, Horse, Swine.

**Storage:** Store undiluted at 2-8°C.

Shelf life: one year from despatch.

**General Readings:** 

- 1. Mollnes TE, Lea T, Frøland SS, Harboe M. Quantification of the terminal complement complex in human plasma by an enzyme-linked immunosorbent assay based on monoclonal antibodies against a neoantigen of the complex. Scand J Immunol. 1985 Aug;22(2):197-202. PubMed PMID: 2412280.
- 2. Mollnes TE, Lea T, Harboe M, Tschopp J. Monoclonal antibodies recognizing a neoantigen of poly(C9) detect the human terminal complement complex in tissue and plasma. Scand J Immunol. 1985 Aug;22(2):183-95. PubMed PMID: 4035298.
- 3. Pettersen HB, Johnson E, Hetland G. Human alveolar macrophages synthesize active complement components C6, C7, and C8 in vitro. Scand J Immunol. 1987 Jun; 25(6):567-70. PubMed PMID: 3602933.
- 4. Berstad AE, Brandtzaeg P, Stave R, Halstensen TS. Epithelium related deposition of activated complement in Helicobacter pylori associated gastritis. Gut. 1997 Feb;40(2):196-203. PubMed PMID: 9071931.
- 5. Stewart, M et al. Antiphospholipid antibody-dependent C5b-9 formation. BJH 1997, 96:451.
- 6. Meuwissen, M et al. Colocalisation of intraplauq C reactive protein, complement, oxidised low density lipoprotein, and macrophages in stable and unstable angina and acute myocardial infarction. J Clin Path 2005, 59:126.