

## Product datasheet for AM26258PU-N

## OriGene Technologies, Inc.

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## Complement C5 (C5) Mouse Monoclonal Antibody [Clone ID: 2942]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 2942

**Applications:** ELISA, FN, IHC, WB

Recommended Dilution: Immunohistochemistry on Frozen Sections: Tissue sections were fixed in Histochoice MB

and treated with levamisole to quench endogenous alkaline phosphatases. As negative

control the primary antibody was omitted (Ref.1). The typical starting working dilution is 1/50.

**Functional Assays**. Immunoassays.

Western blot: A reduced sample treatment and SDS-Page was used. The band size is 14

kDa. The typical starting working dilution is 1/50.

**Positive Control:** Eye tissue of patient with AMD (Ref.1). **Negative Control:** Eye tissue of patient without AMD (Ref.1).

Reactivity: Human Host: Mouse

**Isotype:** IgG2a

Clonality: Monoclonal

**Specificity:** Monoclonal antibody 2942 reacts with a neo-epitope on human C5a/C5a des-Arg that is

formed by proteolytic cleavage of C5 into C5a and C5b during complement activation.

Formulation: PBS

State: Purified

State: Liquid 0.2 µm filtered Ig fraction

Stabilizer: 0.1% BSA

**Concentration:** lot specific

**Purification:** Protein G Chromatography

**Conjugation:** Unconjugated

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

DO NOT FREEZE!

**Stability:** Shelf life: one year from despatch.

**Gene Name:** complement component 5





## Complement C5 (C5) Mouse Monoclonal Antibody [Clone ID: 2942] – AM26258PU-N

Database Link: Entrez Gene 727 Human

P01031

**Background:** C5a is a single chain glycopeptide composed of 74-amino-acids, which is rapidly converted to

the less potent derivate C5a des-Arg upon removal of the C-terminal arginine by carboxypeptidase B. C5a acts as a potent anaphylatoxin by binding to its high affinity receptor C5aR (or CD88) on the membrane of target cells inducing smooth muscle

contraction, increased vascular permeability, degranulation of mast cells and basophils, and the release of lysosomal enzymes. In addition C5a stimulates the directed migration of

neutrophils, eosinophils, basophils and monocytes.

C5a is involved in inflammatory reactions seen in gram-negative bacterial sepsis, trauma, ischemic heart disease, post-dialysis syndrome and a variety of autoimmune diseases. Elevation of C5a is associated with increased cardiovascular risk in patients with advanced atherosclerosis. Also, C5a is closely associated with the capillary leak syndrome in leukemic children after bone marrow transplantation. C5a is also a marker in urine for predicting the onset of acute graft rejection after kidney transplantation and has been shown to be present in extracellular deposits in patients suffering from age-related macular degeneration (AMD).

**Synonyms:** Complement C5 alpha chain, C5a anaphylatoxin, CPAMD4