

## Product Information

### MemDX™ Antibody Discovery - Human Complement C5 (19-1676) (w917s) Membrane

#### Protein, Partial, -His tag

Cat. No.: **MP1321F**

This product is for research use only and is not intended for diagnostic use.

This membrane protein is Human Complement C5 (19-1676) (w917s). It has been tested in SDS-PAGE, ELISA. We provide this protein to facilitate your membrane protein antibody discovery and development.

#### Product Specifications

##### Host Species

Human

##### Target Protein

Complement C5

##### Protein Length

ECD

##### Molecular Weight

The mature form of Complement C5 is a disulfide-linked heterodimer composed of proteolytically cleaved  $\alpha$  and  $\beta$  chain. Each  $\alpha$  and  $\beta$  chain has a calculated MW of 73.9 kDa ( $\beta$  chain) and 114.3 kDa ( $\alpha$  chain). The protein migrates as 80 kDa ( $\beta$  chain) and 110 kDa ( $\alpha$  chain) under reducing (R) condition (SDS-PAGE) due to glycosylation.

##### Sequence

AA Gln 19 - Cys 1676 (Accession # P01031-1 (W917S)).

#### Product Description

##### Activity

Yes

##### Application

SDS-PAGE, ELISA

##### Expression Systems

HEK293

##### Tag

His tag at the C-terminus

##### Protein Format

Soluble

**Form**

LYOPH

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

**Endotoxin**

<1.0 EU/µg by the LAL method

**Purity**

>95% as determined by SDS-PAGE.

**Buffer**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

**Storage**

Stored at lyophilized form at -20°C or lower. Avoid repeated freeze-thaw cycles.

The antigen can be stable for 12 months in lyophilized form after storage at -20°C to -80°C, 3 months under sterile conditions after reconstitution after storage at -80°C.

**Target****Target Protein**

Complement C5

**Full Name**

complement C5

**Introduction**

This gene encodes a component of the complement system, a part of the innate immune system that plays an important role in inflammation, host homeostasis, and host defense against pathogens. The encoded preproprotein is proteolytically processed to generate multiple protein products, including the C5 alpha chain, C5 beta chain, C5a anaphylatoxin and C5b. The C5 protein is comprised of the C5 alpha and beta chains, which are linked by a disulfide bridge. Cleavage of the alpha chain by a convertase enzyme results in the formation of the C5a anaphylatoxin, which possesses potent spasmogenic and chemotactic activity, and the C5b macromolecular cleavage product, a subunit of the membrane attack complex (MAC). Mutations in this gene cause complement component 5 deficiency, a disease characterized by recurrent bacterial infections. Alternative splicing results in multiple transcript variants.

**Alternative Names**

C5D; C5a; C5b; ECLZB; CPAMD4; complement C5; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 4; C5a anaphylatoxin; anaphylatoxin C5a analog; complement component 5; prepro-C5

**Gene ID**

[727](#)

**UniProt ID**

[P01031](#)