

Product datasheet for **AM26162PU-N**

Cr11 Mouse Monoclonal Antibody [Clone ID: TLD-1C11]

Product data:

Product Type:	Primary Antibodies
Clone Name:	TLD-1C11
Applications:	ELISA, FN, IF, IHC, WB
Recommended Dilution:	Immunohistochemistry on frozen sections. Flow cytometry. Functional assays. Immunoassays. Immunofluorescence. Western blot.
Reactivity:	Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Rat microglial cells
Specificity:	This antibody reacts with rat-complement regulator Crry.
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin
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 (3b/4b) receptor 1-like
Database Link:	Entrez Gene 54243 Rat Q63135



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Background:

Complement comprises a system of soluble serum proteins that, upon activation by antibody (classical pathway), sugars (lectin pathway), or bacterial and foreign surfaces (alternative pathway), directly causes cell damage. Complement is constantly activated at low levels in serum, requiring cells to be protect themselves from damage. In human, cells are protected from complement-mediated damage by expression of membrane-bound complement regulatory proteins, which act at several points along the cascade. Human cells are protected by decay-accelerating factor (DAF, CD55), membrane cofactor protein (MCP, CD46) and membrane attack complex inhibitor protein 1 (MIN1, CD59). Furthermore the rat analogues of DAF, MCP and CD59 have been characterized.

Rats and mice express a unique membrane complement regulator of the activating pathways, called complement receptor type-1 related gene Y (Crry). In rats there are two isoforms of Crry, with six or seven short consensus repeats (SCR), encoding 65-70 and 75-85 kDa proteins, respectively, which are both transmembrane anchored. Although Crry has the functional properties of both DAF and MCP, it does not replace them. All rat blood cells express Crry whereas approximately 37 and 39% of the rat T cells express respectively DAF and CD59. Studies in rat revealed that despite lacking DAF and CD59, these double-negative rat T cells were not more susceptible to homologous complement lysis than cells that expressed both DAF and CD59. However, blocking of the only other known rat complement regulator, Crry, enhanced lysis only at the double-negative cells. In rats, Crry exerts powerful control in the activation pathways where it acts both as a cofactor and as a decay accelerator to inactivate convertases. Crry has been successfully expressed and refolded in bacteria. The refolded protein has full-complement regulatory activity in vitro, and has been applied in rat models of arthritis and other inflammatory diseases. The monoclonal antibody TLD-1C11 can be used to block autoimmune phenomena in rats.

Synonyms:

Antigen 5I2