

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	Crry, Rat, clone TLD-1C11	Expiry date	-
Catalog number	HM3032		
Lot number	-	Amount	100 µg
Volume	1 ml	Concentration	100 µg/ml
Formulation	0.2 µm filtered in PBS+0.1%BSA	Conjugate	None
Host Species	Mouse IgG1	Purification	Protein G
Endotoxin	<24 EU/mg		
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes	•		•	•	•	•		•
No								
N.D.		•					•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

General Information

Description The monoclonal antibody TLD-1C11 reacts with rat-complement regulator Crry. 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.

Immunogen Rat microglial cells

Aliases p65, complement receptor type-1 related gene Y, Complement regulator Crry

- References**
1. Flaris, N et al; Characterization of microglia and macrophages in the central nervous system of rats: definition of the differential expression of molecules using standard and novel monoclonal antibodies in normal CNS and in four models of parenchymal reaction. *Glia* 1993, 7: 34
 2. McGrath, Y et al; Development of adenovirus vectors encoding rat complement regulators for use in therapy in rodent models of inflammatory diseases. *J Immunol* 1999, 163: 6834
 3. Fraser, D et al; Bacterial expression and membrane targeting of the rat complement regulator Crry: a new model anticomplement therapeutic. *Protein Sci* 2002, 11: 2512
 4. Hanna, S et al; Rat T cells express neither CD55 nor CD59 and are dependent on Crry for protection from homologous complement. *Eur J Immunol* 2002, 32: 502

Storage&stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Robbert Zwinkels

Date
24/05/2018

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.