

**MONOCLONAL ANTIBODY TO
MOUSE COMPLEMENT RECEPTOR TYPES 1 AND 2 (CR1, CR2)
clone 7E9**



Catalog no	HM1112 (lot number and expiry date are indicated on the label)								
Description	<p>The monoclonal antibody 7E9 recognizes mouse complement receptors type 1 (CR1) and 2 (CR2). CR1 and CR2 are cell surface glycoproteins that are capable of binding to activation fragments of the third and/or fourth complement components (C3 and/or C4). They play a role in the clearance of immune-complexes, phagocytosis, complement regulation, and immunoregulation.</p> <p>Mouse CR1 (MCR1, 190 kD) is found on the surface of B-lymphocytes, follicular dendritic cells and at lower levels on peritoneal macrophages and activated granulocytes. MRC1 has binding activity for C3b and serves as a cofactor for factor I-mediated cleavage of C3b.</p> <p>Mouse CR2 (MCR2, 150 kD) is a type I transmembrane glycoprotein that binds complement fragments (C3d(g), iC3b) and interferon (IFN)-alpha. MCR2 is expressed on B-lymphocytes and probably on follicular dendritic cells. On human B lymphocytes it acts as the Epstein-Barr virus (EBV) receptor. MCR2 mediates the formation of rosettes between B-lymphocytes and E-bearing Crd.</p> <p>MCR1 and MRC2 are very closely related. They are both products of a single gene, Cr2, formed by alternative splicing of mRNA. MCR2 corresponds to the carboxy-terminal portion of MCR1. This is in contrast with human CR1 (CD35) and CR2.</p> <p>The monoclonal antibody 7E9 does not inhibit rosette formation between 2PK3 cells and Crd-coated SRBC indicator cells.</p>								
Aliases	CR1, CD35, KN CR2, CD21								
Immunogen	Purified mouse CR1 from serum								
Species	Rat IgG _{2a}								
Formulation	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin and 0.02% sodium azide.								
Application		F	FC	FS	IA	IF	IP	P	W
	Yes		•			•	•		•
	No			•					
	N.D.	•			•			•	
	<small>N.D.=Not Determined; F=Frozen sections; FC=Flow cytometry; FS=Functional studies; IA=Immuno assays; IF=Immuno fluorescence; IP=Immuno precipitation; P=Paraffin sections; W=Western blot</small>								
Use	For flow cytometry and Western blotting, 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.								
Storage and stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for 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.								
References	<ol style="list-style-type: none"> 1. Kinoshita, T et al; Monoclonal antibodies to mouse complement receptor type 1 (CR1): their use in a distribution study showing that mouse erythrocytes and platelets are CR1-negative. <i>J Immunol</i> 1988, <i>140</i>: 3066 2. Kinoshita, T. et al; Characterization of murine complement receptor type 2 (CR2) and its immunological cross-reactivity with type 1 receptor (CR1). <i>Inter Immunol</i> 1990, <i>2</i>: 651 3. Pramoongjago, P. et al; Ligand specificities of mouse complement receptors type 1 (CR1) and type 2 (CR2) purified from spleen cells. <i>Int Immunol</i> 1993, <i>5</i>: 337 4. Hofer, M et al; Modulation of murine complement receptor type 2 (CR2/CD21) ectodomain shedding by its cytoplasmic domain. <i>Mol Immunol</i> 2008, <i>45</i>: 2127 								
Also available	HM1045	Monoclonal antibody against Mouse C3, clone 11H9							
	HM1046	Monoclonal antibody against Mouse C4, clone 16D2							