



Mouse Anti-Rat β -2-Microglobulin Monoclonal antibody, clone 4C9 (CABT-L4291)

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

PRODUCT INFORMATION

Product Overview	The 4C9 monoclonal antibody reacts with rat beta 2 microglobulin (β 2M) a 12 kDa component of MHC class I molecules. β -2-microglobulin, a non-membrane-anchored glycoprotein, noncovalently associates with the polymorphic heavy chain of MHC class I molecules to form the HLA class I antigen complex
Target	Rat β -2-Microglobulin
Immunogen	Soluble neonatal Fc receptor (FcRn)
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat
Clone	4C9
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	IA
Molecular Weight	150 kDa
Format	0.2 μ M filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg

Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	The 4C9 monoclonal antibody reacts with rat beta 2 microglobulin (β2M) a 12 kDa component of MHC class I molecules. β-2-microglobulin, a non-membrane-anchored glycoprotein, noncovalently associates with the polymorphic heavy chain of MHC class I molecules to form the HLA class I antigen complex. β-2-microglobulin is expressed on all leukocytes, platelets, endothelial cells and epithelial cells and plays an essential role in mediating proper folding and expression of MHC class I molecules. The importance of β-2-microglobulin is illustrated by β-2-microglobulin knockout mice which show a normal distribution of T lymphocytes, but have no mature CD4 or CD8 T cells and are therefore defective in CD4 and CD8 T cell-mediated cytotoxicity. The 4C9 antibody recognizes rat β-2-microglobulin alone or complexed with FcRn heavy chains.
Keywords	B2M;beta-2-microglobulin;Beta-2-microglobulin;beta chain of MHC class I molecules;beta-2-microglobin;β2-MG

GENE INFORMATION

Official Symbol	beta-2-microglobulin
Synonyms	B2M; beta-2-microglobulin; Beta-2-microglobulin; beta chain of MHC class I molecules; beta-2-microglobin; β2-MG