

Anti-Plasma cell antigen 1 [4G6] Standard Size Ab00507-24.1

This chimeric goat antibody was made using the variable domain sequences of the original Rat format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Goat IgG, Kappa

Clone Number: 4G6

Alternative Name(s) of Target: PC.1

UniProt Accession Number of Target Protein:

Published Application(s): WB, ELISA, FC, IF, IHC

Published Species Reactivity: Mouse

Immunogen: The original version of this antibody was raised by immunizing rats with MRL-lpr/lpr T cells.

Specificity: This antibody recognizes the plasma cell antigen 1.

Application Notes: The antibody binds specifically to PC.1, an antigen which is highly expressed on the surface of plasma cells and some non-lymphoid tissue. The antigen is involved with secretion or exocytosis of immunoglobulins from B cells, and may play a role in the secretion of lymphokines from lpr/lpr T cells. When the population of this subset of T cells expands, it accumulates in lymph nodes and results lymphadenopathy. Studies have shown that preventing this expansion by performing neonatal thymectomy delays the onset of systemic lupus erythematosus (SLE), suggesting that the T cells play a role in the development of the autoimmune disease. Monoclonal antibodies directed against PC.1 can be useful in the diagnosis and monitoring of SLE.

Antibody First Published in: Dumont FJ, Habbersett RC, Coker LZ, Nichols EA, Treffinger JA. High level expression of the plasma cell antigen PC.1 on the T-cell subset expanding in MRL/MpJ-lpr/lpr mice: detection with a xenogeneic monoclonal antibody and alloantisera. Cell Immunol. 1985 Dec;96(2):327-37.

[PMID:2943419](#)

Note on publication: Describes the generation of the xenogeneic monoclonal antibody 4G6, which reacts strongly with T cells of MRL-lpr/lpr mice that highly express PC.1. This indicates that the T cell subset involved in the development of systemic lupus erythematosus syndrome possesses properties of B cells.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In:

PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.