

AM33283PU-S**Monoclonal Antibody to Plasma Cell - Purified**

Alternate names:	Plasma B cell, Plasmocytes
Quantity:	0.1 mg
Concentration:	0.2 mg/ml
Background:	Plasma cells (also called plasma B cells or plasmocytes), which are large lymphocytes derived from an antigen-specific B cell, secrete antibodies and are responsible for humoral immunity. Plasma cells differentiate from B cells upon stimulation by CD4+ lymphocytes. The B cell acts as an antigen-presenting cell (APC), consuming an offending pathogen, which is taken up by the B cell by phagocytosis and broken down within proteosomes. Plasma cells contain basophilic cytoplasm; their nucleus contains heterochromatin organized in a characteristic cartwheel arrangement.
Host / Isotype:	Mouse / IgG2a
Recommended Isotype Controls:	AM03096PU-N
Clone:	SPM310
Immunogen:	Pancreatic cancer related Mucin.
Format:	State: Liquid purified IgG fraction from Bioreactor Concentrate Purification: Protein A/G Chromatography Buffer System: 10mM PBS Preservatives: 0.05% Sodium Azide Stabilizers: 0.05% BSA
Applications:	Immunohistochemistry on Paraffin Sections: Use Plasma Cell antibody at 0.5-1 µg/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Positive Control: Tonsil or Lymph node. Note that this Monoclonal Antibody is not suitable for staining Frozen tissues. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes an intracytoplasmic antigen which shows a very high degree of specificity for plasma cells. This antigen is present in normal as well as neoplastic plasma cells. Plasma cells, which are large lymphocytes derived from an antigen-specific B cell, secrete antibodies and are responsible for humoral immunity. Plasma cells differentiate from B cells upon stimulation by CD4 + lymphocytes. The B cell acts as an antigen-presenting cell (APC), consuming an offending pathogen, which is taken up by the B cell by phagocytosis and broken down within proteosomes. Plasma cells contain basophilic cytoplasm; their nucleus contains heterochromatin organized in a characteristic cartwheel arrangement. This Plasma Cell Marker antibody superbly recognizes normal and neoplastic plasma cells in routine formalin-fixed, paraffin-embedded tissue sections. It is of potential value in identifying myeloma or

plasmacytoma in bone marrow or other tissues. It also helps differentiate lymphoplasmacytoid lymphoma from lymphocytic and follicular lymphoma.

Cellular Localization: Cytoplasmic.

Negative Species: Rat.

Species Reactivity:

Tested: Human.

Storage:

Store undiluted at 2-8°C.

Shelf life: one year from despatch.

General Readings:

1. Turley H, Jones M, Erber W, Mayne K, de Waele M, Gatter K. VS38: a new monoclonal antibody for detecting plasma cell differentiation in routine sections. *J Clin Pathol.* 1994 May;47(5):418-22. PubMed PMID: 7517959.

Pictures:

Formalin-paraffin human tonsil stained with Plasma Cell Marker MAb (Clone SPM310).

