

Product datasheet for **AM01199PU-N**

SERPINB9 Mouse Monoclonal Antibody [Clone ID: 7D8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	7D8
Applications:	FC, IHC, WB
Recommended Dilution:	Western Blot: This antibody detects a band of ~42 kda under Reducing Conditions Flow Cytometry: Use 10 µl of 1/10-1/100 diluted antibody to label 1x10 ⁶ cells in 100 µl. Membrane permeabilisation is required for this application (The use of Leucoperm is recommended for this purpose). Immunohistochemistry on Paraffin Sections: 1/50. This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose. Recommended Positive Control: Tonsil. Also Suitable for use in Indirect Immunofluorescence (See Ref.2 for more details).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant PI-9 produced in <i>P. pastoris</i> . Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity:	This antibody is specific for SERPINB9/PI-9 (Proteinase Inhibitor 9).
Formulation:	PBS State: Purified State: Liquid purified Ig fraction Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.



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Stability:	Shelf life: one year from despatch.
Gene Name:	serpin family B member 9
Database Link:	Entrez Gene 5272 Human P50453
Background:	PI-9 is a 42kDa intracellular nucleocytoplasmic serpin expressed in cytotoxic lymphocytes (CTLs), natural killer (NK) cells, monocyte-derived dendritic cells (DCs), and to a lesser extent in B cells and myeloid cells. Granzyme B (grB) is a serine protease highly expressed by CTLs and NK cells, which is endocytosed by virusinfected and malignant target cells. The subsequent release of grB from the endocytic vesicles into the cytoplasm of the target cells, triggers grB-mediated apoptosis, through cleavage of various cytoplasmic or nuclear proteins. PI-9, up-regulated in response to grB production and degranulation, has been identified as a potent inhibitor of Granzyme B-mediated apoptosis, providing a vital self-protection mechanism against the premature apoptosis of CTLs and NK cells by grB, which may escape into the cytoplasm of the effector cells themselves.
Synonyms:	PI9, PI-9, Serpin B9, Cytoplasmic antiproteinase 3, CAP-3, CAP3, Proteinase inhibitor 9