



Peninsula Laboratories, LLC

A Member of the Bachem Group

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Monoclonal Antibody To Human CD177

Monoclonal antibody MEM-166 recognizes the CD177 antigen, a 58-64kDa glycosyl-phosphatidylinositol (GPI) anchored plasma membrane glycoprotein that is also expressed on secondary granules. CD177 is also known as neutrophil-specific antigen NB1 and human neutrophil antigen HNA-2a. CD177 is expressed on neutrophils and neutrophilic metamyelocytes, and myelocytes from 89 to 97 per cent of healthy individuals. The expression of CD177 is upregulated on granulocytes stimulated with the chemotactic peptide f-met-leu-phe. The function of CD177 is under investigation, and there is evidence that CD177 is a heterophilic binding partner of platelet endothelial cell adhesion molecule-1 PECAM-1 (CD31). This interaction may constitute a pathway involved in neutrophil transmigration. CD177 is unique in that it is expressed on subpopulations of neutrophils, altogether on approximately 60% of neutrophils.

Product Number:	T-1374
Clone:	MEM-166
Host species, isotype:	Mouse IgG1
Quantity:	100 µg
Format:	Affinity purified, lyophilized Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA), and 0.09% sodium azide as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing.
Applications:	Tested for immunohistochemistry (IHC); has been described to work in FACS, immunoprecipitation and Western Blot. Approximate working dilution for IHC: Frozen sections: 0.25 µg/ml 1:800) Paraffin sections: not reactive on routinely processed samples. Optimal dilutions should be determined by the end user. Suggested positive control: Human placenta
Immunogen:	Human granulocytes
Antigen, epitope:	The antigen is CD177. The epitope has not been further characterized.
Antigen distribution:	Isolated cells: 56-64% of neutrophils express the antigen. Tissue sections: Highly expressed on neutrophils in most tissues.
Specificity:	Human: CD177 Other: non-human primates.



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Selected references

Leukocyte Typing VII., Mason D. et al (Eds.), Oxford University Press (2002).

Sachs, U.J. et al.: The neutrophil-specific antigen CD177 is a counter-receptor for platelet endothelial cell adhesion molecule-1 (CD31). *J. Biol Chem* 282: 23603-12 (2007).

Bauer S. et al.: Proteinase 3 and CD177 are expressed on the plasma membrane of the same subset of neutrophils. *J. Leukoc. Biol.* 81: 458-64 (2007).

For *in vitro* research only. Caution: this product contains sodium azide, a poisonous and hazardous substance.