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Monoclonal Antibody To Human Dendritic Cells

Marker For A Complement C9 Neoepitope On Follicular Dendritic Cells

Monoclonal antibody X-11 detects a neoepitope of the complement component C9 which is expressed when C9 is assembled in the terminal complement complex (TCC). Follicular dendritic cells and sinus lining cells in lymph node and tonsil, and blood dendritic cells express the X-11 antigen. $X\text{-}11^+$ blood dendritic cells show typical dendritic veils and are the most potent stimulator cells in an allogenic mixed leukocyte reaction when compared with other leukocytes. $X11^+$ cells strongly react with anti S100 and weakly with anti CD68. The literature suggests that $X\text{-}11^+$ cells are dendritic cells of monocytic origin.

Product number: T-1006

Clone: X-11

Lot: 05PO0406

TECHNICAL AND ANALYTICAL CHARACTERISTICS:

Host species, subclass:	Mouse IgG1
Quantity:	200µg
Format:	Affinity purified, lyophilized
	Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 5mg/ml bovine serum albumin (BSA) as a stabilizer and 0.1% Kathon 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.
	Approximate working dilution for IHC: Frozen sections: 0.4µg/ml (1:1000) Paraffin sections: 2µg/ml (1:200); microwave pretreatment for antigen retrieval recommended.
	Optimal dilutions should be determined by the end user.
	Suggested positive control: Human tonsil.
	Please see **www.bma.ch** for protocols and general information.
Immunogen:	Enriched human blood dendritic cells.
Antigen, epitope:	The antigen is a neoepitope of C9 after assembly in the terminal complement complex. Epitope sequence has not been determined.

Antigen distribution:	**Isolated cells:** Positive on dendritic cells in the peripheral blood. It is absent from all other blood cells. LPS or IFN-γ stimulated monocytes do not express the antigen.
	Tissue sections: The antigen is found on follicular dendritic cells of lymph nodes in the B-cell dependent areas. Some macrophages of the tonsil stain also positive with the antibody. It is absent from the thymus and the skin. In the spleen, trabeculae are stained positively by X-11.
Specificity:	**Human:** follicular dendritic (reticulum) cells; C9 neoepitope.
	Other: No cross reaction observed when tested with polymerized complement C9 of 38 different species, including mouse, rat, rabbit and guinea pig.

Selected references

Halstensen, T.S. et al.: Terminal complement complex (TCC) and S-protein (vitronectin) on follicular dendritic cells in human lymphoid tissues. Immunology: 65, 193-197 (1988).

Zwirner, J. et al.: Complement activation in human lymphoid germinal centres. Immunolgy: 66, 270-277 (1989).

Würzner, R. et al.: Blood dendritic cells carry terminal complement complexes on their cell surface as detected by newly neoepitope-specific monoclonal antibodies. Immunolgy: 74, 132 - 138 (1991).

Peters, J.H. et al.: Differentiation of human monocytes into CD14 negative accessory cells: Do dendritic cells derive from the monocytic lineage. Pathobiology: 59, 122 - 126 (1991).

Tiemssen, C.T. et al.: Characterization of Human Blood Dendritic Cells : Cytokine Profiles. Abstr. 3rd Int. Symposium on Dendritic Cells in fundamental and Clinical Immunology, Annecy June 1994

For in vitro research only. This product contains Kathon as a preservative.