



CD57

IHC of CD57 on an FFPE Tonsil Tissue

Description CD57 (NK-1) recognizes a (MW 100-110 kDa) oligosaccharide antigenic determinant on myeloid cells and on a variety of polypeptides, lipids and chondroitin sulfate proteoglycans. This surface antigen is associated with myelin-associated glycoprotein (MAG). The CD57 antigen is present on 15-20% of normal peripheral blood mononuclear cells. It is expressed on a subset of natural killer cells (60%) and on a subset of T-lymphocytes. This carbohydrate is also present on N-CAM in the nervous system.

Follicular Center-cell Lymphomas often contain many NK cells within the neoplastic follicles. NK-1 reportedly also reacts with a variety of cell types in non-lymphoid tissues. NK-1 stains neuroendocrine cells and their tumors, including Carcinoid Tumor and Medulloblastomas. NK-1 also reacts with a variety of cell types in non-lymphoid tissues, including Neurofibroma, Ganglioneuroma, and Prostate Carcinoma.

Antibody Type	Mouse Monoclonal	Clone	CD57/B8
Isotype	IgM/K	Reactivity	Paraffin, Frozen
Localization	Membranous	Control	Tonsil, Lymph Node
Storage	Store at 2°-8°C	Stability	2 years

For long-term storage of the concentrated antibody, it is recommended that aliquots of the antibody be frozen at -20°C in glycerol 50% (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Dilute using an antibody diluent such as ImmunoDetector Protein Block/Antibody Diluent (BSB 0040 and BSB 0041) or ImmunoDNA Background Blocker (BSB 0103-BSB 0107).

Presentation CD57 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Availability	Catalog No.	Antibody Type	Dilution	Volume/QTY
	BSB 5274	Prediluted	Ready-To-Use	3.0 ml
	BSB 5275	Prediluted	Ready-To-Use	7.0 ml
	BSB 5276	Prediluted	Ready-To-Use	15.0 ml
	BSB 5277	Concentrated	1:100-1:500	0.1 ml
	BSB 5278	Concentrated	1:100-1:500	0.5 ml
	BSB 5279	Concentrated	1:100-1:500	1.0 ml
	BSB 5280	Control Slides		5

Note: For concentrated antibodies, please centrifuge prior to use to ensure recovery of all product.

- References**
1. Lanier LL, et al. *Journ of Immun.* 1983;131(4):1789-1796
 2. Ritchie AW, James K, Micklem HS, *Clin and Exp Imm.* 1983;51(3):439-447
 3. Caillaud JM, et al. *Cancer Res.* 1984;44(10):4432-4439
 4. Tucker, et al. *Cell Differentiation*, 1984;14(3):223-230
 5. Abo T, et al. *Cellular Immun.* 1982;73(2):376-384

Protocol Suggested protocol on reverse

Recommended Immunohistochemical Protocol

- Pretreatment**
1. Cut and mount 3-4 micron formalin-fixed paraffin-embedded tissues on positive charged slides.
 2. Air dry for 2 hours at 58° C.
 3. Deparaffinize, dehydrate and rehydrate tissues.
 4. Subject tissues to heat epitope retrieval using a suitable retrieval solution such as **ImmunoDNA Retriever with Citrate** (BSB 0020-BSB 0023) or **EDTA** (BSB 0030-BSB 0033).
 5. Any of three heating methods may be used:
 - a. **Electric Pressure Cooker**
Place standoff rack at base of pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high, and incubate for 15 minutes. Open and immediately transfer slides to room temperature.
 - b. **Water Bath Method**
Place tissues/slides in a pre-warmed staining dish or coplin jar containing the **ImmunoDNA Retriever with Citrate** or **EDTA** in a water bath set at 95°-99° C. Incubate for 30-60 minutes.
 - c. **Conventional Steamer Method**
Place tissues/slides in a pre-warmed staining dish or coplin jar containing the **ImmunoDNA Retriever with Citrate** or **EDTA** in a Steamer, cover and steam for 30-60 minutes.
 6. After heat treatment, transfer slides in **ImmunoDNA Retriever with Citrate** or **EDTA** to room temperature and let stand for 15-20 minutes.
 7. Wash slides with IHC wash buffer or DI water.
 8. Continue IHC staining protocol.

Immunohistochemical Protocol

Step	ImmunoDetector (AP or HRP)	PolyDetector (AP or HRP)
Peroxidase/AP Block	5 minutes	5 minutes
Primary Antibody	30 minutes	45 minutes
Secondary Biotinylated Link	10 minutes	Not Applicable
AP or HRP Label	10 minutes	45 minutes
Substrate-Chromogen	5-10 minutes	10 minutes
Counterstaining	Time varies with counterstain	Time varies with counterstain

