# Mouse Anti-Perforin [MD295]: MC0301, MC0301RTU7

#### Intended Use: For Research Use Only

**Description:** Perforin is a potent cytolytic poreforming protein. It is a specific marker of functionally active cytotoxic T-lymphocytes (CTLs) and natural killer (NK) cells. Perforin is a key effector mechanism in T cellmediated cytotoxicity. It mediates cytolysis of target cells by membrane damage and apoptosis. Plays a key role in secretory granule-dependent cell death, and in defense against virus-infected or neoplastic cells. Plays an important role in killing other cells that are recognized as non-self by the immune system, e.g. in transplant rejection or some forms of autoimmune disease. Can insert into the membrane of target cells in its calcium-bound form, oligomerize and form large pores. Promotes cytolysis and apoptosis of target cells by facilitating the uptake of cytotoxic granzymes.

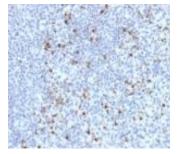
### Specifications:

Description	Catalog No.	Size	
Package:			
Applications:	IHC		
Storage:	Store at 2°- 8°C		
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium	azide (NaN3)	
Localization:	Granular cytoplasm		
Immunogen:	Recombinant human perforin protein fragment aa 413-552		
Reactivity:	Human		
Isotype:	IgG2c/k		
Source:	Mouse		
Clone:	MD295		

Description	Catalog No.	Size
Perforin Concentrated	MC0301	1 ml
Perforin Prediluted	MC0301RTU7	7 ml

## IHC Procedure\*:

Positive Control Tissue:SpleenConcentrated Dilution:50-200Pretreatment:Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°CIncubation Time and Temp:30-60 minutes @ RTDetection:Refer to the detection system manual\* Result should be confirmed by an established diagnostic procedure.



FFPE human spleen stained with anti-Perforin using DAB

#### **References:**

- 1. Antibody-Dependent Cell-Mediated Cytotoxicity Epitopes on the Hemagglutinin Head Region of Pandemic H1N1 Influenza Virus Play Detrimental Roles in H1N1-Infected Mice. Ye ZW, et al. Front Immunol 8:317, 2017.
- 2. A Multiantigenic DNA Vaccine That Induces Broad Hepatitis C Virus-Specific T-Cell Responses in Mice. Gummow J, et al. J Virol 89:7991-8002, 2015.
- 3. Interleukin-15 is required for immunosurveillance and immunoprevention of HER2/neu-driven mammary carcinogenesis. Croci S, et al. Breast Cancer Res 17:70, 2015.
- 4. Preclinical models for neuroblastoma: establishing a baseline for treatment. Teitz T, et al. PLoS One 6:e19133, 2011.

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