

DESCRIPTION

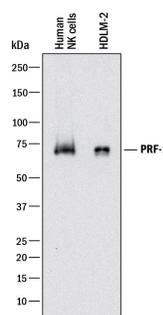
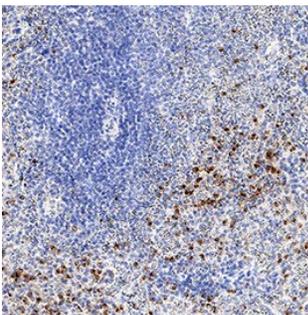
Species Reactivity	Human
Specificity	Detects human Perforin in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 1001103
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Synthetic peptide containing human Perforin Pro22-Trp555 Accession # P14222
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunohistochemistry	5-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Perforin by Western Blot. Western blot shows lysates of human NK cells and HDLM-2 human Hodgkin's lymphoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Perforin Monoclonal Antibody (Catalog # MAB8011) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Perforin at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>Perforin in Human Spleen. Perforin was detected in immersion fixed paraffin-embedded sections of human spleen using Mouse Anti-Human Perforin Monoclonal Antibody (Catalog # MAB8011) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cell surfaces and cytoplasm in splenocytes. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Perforin is a pore forming, cytolytic protein that is a component of cytolytic T-cell and NK cell granules. Perforin activates clathrin- and dynamin-dependent endocytosis, which removes perforin and granzymes from the plasm membrane to early endosomes, preserving outer membrane integrity. Perforin facilitates granzyme uptake and avoids the proinflammatory necrotic death of a membrane-damaged cell. Defects in the Perforin gene results in Familial hemophagocytic lymphohistiocytosis (FHL). Perforin-based effector systems are involved not only in the lysis of abnormal cells but also in the down-regulation of cellular immune activation.