

## Product datasheet

# Anti-Perforin antibody [CB5.4] ab16074

★★★★☆ 3 Abreviews 20 References 1 Image

### Overview

<b>Product name</b>	Anti-Perforin antibody [CB5.4]
<b>Description</b>	Rat monoclonal [CB5.4] to Perforin
<b>Host species</b>	Rat
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-Fr, IHC-P, ICC, IP, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse
<b>Immunogen</b>	Recombinant fragment, corresponding to amino acids 98 - 534 of Mouse Perforin.
<b>Epitope</b>	This antibody recognizes mouse perforin, region amino acids 402-534.
<b>General notes</b>	This product was changed from ascites to tissue culture supernatant on 31 <sup>st</sup> May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.02% Sodium azide Constituent: PBS
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	CB5.4
<b>Isotype</b>	IgG2a

### Applications

Our [Abpromise guarantee](#) covers the use of **ab16074** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

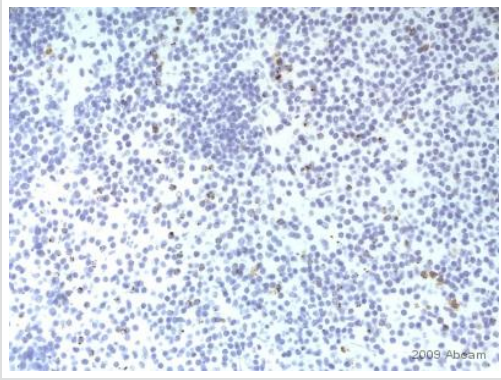
Application	Abreviews	Notes

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 66 kDa (predicted molecular weight: 66 kDa).
IHC-Fr		Use at an assay dependent concentration.
IHC-P	★★★★★	Use at an assay dependent concentration.
ICC		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
ICC/IF	★★★★★	Use at an assay dependent concentration.

## Target

<b>Function</b>	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.
<b>Involvement in disease</b>	Defects in PRF1 are the cause of hemophagocytic lymphohistiocytosis familial type 2 (FHL2) [MIM:603553]; also known as HPLH2. Familial hemophagocytic lymphohistiocytosis (FHL) is a genetically heterogeneous, rare autosomal recessive disorder. It is characterized by immune dysregulation with hypercytokinemia and defective natural killer cell function. The clinical features of the disease include fever, hepatosplenomegaly, cytopenia, hypertriglyceridemia, hypofibrinogenemia, and neurological abnormalities ranging from irritability and hypotonia to seizures, cranial nerve deficits, and ataxia. Hemophagocytosis is a prominent feature of the disease, and a non-malignant infiltration of macrophages and activated T lymphocytes in lymph nodes, spleen, and other organs is also found.
<b>Sequence similarities</b>	Belongs to the complement C6/C7/C8/C9 family. Contains 1 C2 domain. Contains 1 EGF-like domain. Contains 1 MACPF domain.
<b>Domain</b>	The C2 domain mediates calcium-dependent binding to lipid membranes. A subsequent conformation change leads to membrane insertion of beta-hairpin structures and pore formation. The pore is formed by transmembrane beta-strands.
<b>Post-translational modifications</b>	N-glycosylated.
<b>Cellular localization</b>	Cytoplasmic granule lumen. Secreted. Cell membrane. Endosome lumen. Stored in cytoplasmic granules of cytolytic T-lymphocytes and secreted into the cleft between T-lymphocyte and target cell. Inserts into the cell membrane of target cells and forms pores. Membrane insertion and pore formation requires a major conformation change. May be taken up via endocytosis involving clathrin-coated vesicles and accumulate in a first time in large early endosomes.

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Perforin antibody [CB5.4] (ab16074)

This image is courtesy of an anonymous Abreview

ab16074 staining Perforin in Mouse lymphoid tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with a zinc-based fixative and blocked with rodent block-M for 20 minutes at 20°C. Samples were incubated with primary antibody (1/50 in TBS + 0.05% Tween20) for 1 hour at 20°C. A HRP-conjugated Goat polyclonal was used as the secondary antibody.

This image was generated using the ascites version of the product.

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