



Rev: A
Release Date: 03/13/2014
IVD

CD45 (EP68)

Clone	EP68
Source	Rabbit Monoclonal
Cat #	PR023-6ml RTU PR023-3ml RTU CR023-0.5ml Concentrated CR023-0.1ml Concentrated
Regulatory Status	IVD

Intended Use:

This antibody is intended for use to qualitatively identify CD45 by light microscopy in formalin fixed, paraffin embedded tissue sections using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient's clinical history and other diagnostic tests. A qualified pathologist must perform evaluation of the test.

Summary and Explanation:

CD45, also known as the leukocyte common antigen (LCA), is a transmembrane protein-tyrosine phosphatase (PTPase) that is expressed in almost all hematolymphoid cells including lymphocytes, granulocytes, monocytes and macrophage, but not in mature erythrocytes and megakaryocytes. CD45 antibody labelling of majority of hematolymphoid neoplasms, is a first line of marker for the identification of tumors with hematopoietic origin. Rare cases of undifferentiated and neuroendocrine carcinomas with CD45 positive staining have been reported.

Immunogen: A synthetic peptide corresponding to residues in the C-terminal domain of human CD45 protein.

Isotype: Rabbit IgG

Reagent Provided:

Concentrated format: Antibody to CD45 is affinity purified and diluted in antibody diluent, with 1% bovine serum albumin (BSA) and 0.05% sodium azide (NaN₃).
Recommended dilutions: 1:50 – 1:100.

The antibody dilution and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by individual laboratory.

Pre-diluted format: PathnSitu ready to use antibodies are pre titrated to optimal staining conditions. Further dilution may lose the activity and may yield to sub optimal staining.

Storage Recommendations: Store at 2-8 °C. Do not use after expiration date provided on the vial.

Staining Recommendations:

Antigen Retrieval Solution: Use **Citrate Buffer (PathnSitu cat # PS007)** as antigen retrieval solution
Heat Retrieval Method: Retrieve sections under steam pressure for 15 min using PathnSitu's MERS (Multi Epitope Retrieval System) then allow solution to cool for 10 minutes then transfer tissue sections/slides to distilled water.

Primary Antibody: Cover the tissue sections with primary antibody and incubate for 30 min at room temperature when used PathnSitu PolyExcel Detection System.

Detection System: Refer to PathnSitu PolyExcel detection system protocol or manufacturer's detection kit staining protocol when used other vendor detection system.

Cellular Localization: Membrane/Cytoplasm

Positive Control: Tonsil or Lymphoma

Troubleshooting: Follow the antibody specific protocol recommendations according to data sheet provided. If unusual results occur, contact PathnSitu Technical Support at 040-2701 5544 or techsupport@pathnsitu.com.

Limitations and Warranty: There are no warranties, expressed or implied, which extend beyond this description. PathnSitu is not liable for property damage, personal injury, or economic loss caused by this product.

Bibliography:

1. Penninger JM, *et al.*: *Nat Immunol*2001, 2:389-396
2. Kurtin PJ, *et al.*: *Hum Pathol*1985, 16:353-365
3. Nandedkar MA, *et al.*: *Mod Pathol*1998, 11:1204-1210

CD45, EP68 antibody has been created by Epitomics Inc., using Epitomics' proprietary rabbit monoclonal antibody technology covered under Patent No.'s 5,675,063 and 7,402,409.