

Rev.: 2018/12/5

CD4		
Recombinant Rabbit Monoclonal Antibody		Catalog# BX50023
Product Datasheet		Clone# BP6028
Predicted Molecular Wt:	51kDa	Purity: ProA affinity purified IgG
Species Cross-reactivity:	Human	Form: Liquid
Applications:	IHC-P	Swissprot ID: P01730

## Background:

The CD4 molecule is a glycoprotein, belonging to immunoglobulin superfamily that is associated with HLA class II antigen recognition. It is a co-receptor that assists the T-cell receptor (TCR) with an antigen-presenting cell and also interacts directly with MHC class II molecules on the surface of the antigen-presenting cells using its extracellular domain.

In lymphatic tissues, the CD4+ T cells are seen in large numbers in the parafollicular zone, while scattered cells are found in the germinal centres and mantle zone. CD4 is also demonstrated in hepatic sinusoidal cells, monocytes and monocytes-derived cells but not expressed on B cells and immature thymocytes. Most mature T-cell lymphomas are CD4 positive with the exception of aggressive NK-cell leukaemia and extranodal NK/T-cell lymphomas: subcutaneous panniculitis-like T-cell lymphoma (which is usually CD8 positive), enteropathy-type T-cell lymphoma and hepatosplenic T-cell lymphoma. CD4 is also expressed in histiocytic sarcomas and Langerhans cell histiocytosis as well as in splenic littoral cell haemangioma.

CD4 plays an important role in the classification of lymphocytes in inflammatory lesions and malignant lymphomas.

#### Subcellular location:

Membrane

## **Recommended method:**

Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

## Immunogen:

Synthetic peptide corresponding to CD4 residues within aa200-300 of CD4 was used as an immunogen.

## Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

# Storage conditions:

-20°C

## Storage instructions:

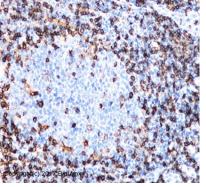
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

## **Recommended Dilutions:**

IHC-P: 1:100-1:200

## **Background References:**

- Karandikar NJ, et.al, Am J Clin Pathol. 2002 May;117(5):819-25.
- 2. Beaty MW, et.al, Am J Surg Pathol. 2001 Sep;25(9):1111-20.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections analysis of tonsil tissue labelling CD4 with BP6028. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0

Product QC'd by:

Vite

For research use only. Not for use in diagnostic or therapeutic applications.