

Rev.: 2024-1-3

CD3G
Recombinant Rabbit Monoclonal Antibody
Product DatasheetCatalog#BX50314Product DatasheetClone#BP6291Predicted Molecular Wt:
Species Cross-reactivity:
Human20kDaPurity:
Form:
LiquidPredicted Molecular Wt:
Species Cross-reactivity:
HUMan1HC-PSwissprot ID:
P09693

Background:

When T cells encounter antigens via the T cell receptor (TCR), information about the quantity and quality of antigens is relayed to the intracellular signal transduction machinery. This activation process depends mainly on CD3 (Cluster of Differentiation 3), a multiunit protein complex that directly associates with the TCR. CD3 is composed of four polypeptides: ζ (CD3Z), γ (CD3G), ϵ (CD3E), and δ (CD3D). Each of these polypeptides contains at least one immunoreceptor tyrosine-based activation motif (ITAM). Engagement of the TCR complex with foreign antigens induces tyrosine phosphorylation in the ITAM motifs and phosphorylated ITAMs function as docking sites for signaling molecules such as ZAP-70 and the p85 subunit of PI-3 kinase. In addition to this role of signal transduction in T-cell activation, CD3G plays an essential role in the dynamic regulation of TCR expression at the cell surface.

CD3G is generally expressed in T cells and their source tumor cells.

CD3G antigen appearance at all stages of T cell development, and makes it an ideal T cell marker for both the detection of normal T cells and T cell neoplasms (lymphomas and leukemias).

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. This information is proprietary to Biolynx.

Storage Buffer:

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

Storage Conditions:

-25°C to -18°C

Shipment Instructions:

Shipped on blue ice. Upon delivery store at -25°C to - 18°C. Avoid freeze / thaw cycles.

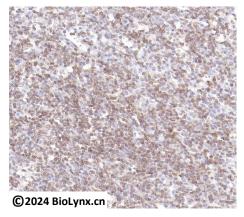
Recommended Dilution:

IHC-P: 1:100-1:200

Background References:

1. Martin-Jaular L et al. EMBO J 40:e105492 (2021).

2. Moreira-Teixeira L et al. Nat Immunol 21:464-476 (2020).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human T-cell lymphoma labelling CD3G with BP6291.

for

Product QC'd by:

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