

Anti-CD3 Antibody

IRS074



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	mIHC

Description: The CD3 protein is a T-cell marker, a complex of four structurally distinct membrane glycoprotein isoforms, 20-50 kDa, comprising extracellular, transmembrane and intracellular domains. The CD3 complex is responsible for mediating signal transduction to the internal environment upon antigenic recognition by TCR, causing T-cell proliferation and release of cytokines. Except for a weak expression in Purkinje cells (with some of the Abs) and activated NK-cells, CD3 is found only in T-cells. CD3 appear in the cytoplasm of prothymocytes, and on the surface of about 95% of thymocytes, while cytoplasmic CD3 is lost as the cells differentiate into medullary thymocytes. In therapy resistant celiac disease, a shift from membranous to cytoplasmic CD3 expression is seen (together with loss of CD8). In malignant lymphomas, CD3 is a pan-T-cell lineage-restricted antigen, detected in 80-97% of the T-cell lymphomas. Mature T-cell lymphomas including cases of mycosis fungoides, peripheral T-cell lymphoma and anaplastic large cell lymphoma may aberrantly lose CD3. NK-cell lymphomas can show a cytoplasmic reaction. Reed-Sternberg cells may show a globular paranuclear reaction. CD3 is an important marker in the classification of malignant lymphomas and lymphoid leukaemias. Also the marker is useful for the identification of T-cells in, e.g., celiac disease, lymphocytic colitis and colorectal carcinomas associated with loss of a mismatch repair protein.

Immunogen:	Synthetic peptide within Human CD3 aa 150 to the C-terminus (internal sequence).
Positive control:	Mouse spleen tissue.
Subcellular location:	Cell membrane.
Database links:	SwissProt: P22646 Mouse
Recommended Dilutions:	
mIHC	1:100
Storage Buffer:	PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.
Storage Instruction:	Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Images

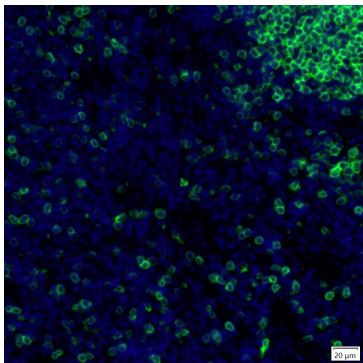


Fig1: mlHC analysis of mouse spleen tissue (Formalin/PFA-fixed paraffin-embedded sections) with Rabbit anti-CD3 antibody (IRS074) at 1/100 dilution. The immunostaining was performed with the IRISKitCmTSA Kit (900808). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Erman B. et. al. Biallelic Form of a Known CD3E Mutation in a Patient with Severe Combined Immunodeficiency. J Clin Immunol. 2020 Apr
2. Chen Q. et. al. CD3(+)/CD20(+) T cells and their roles in human diseases. Hum Immunol. 2019 Mar

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn