

CD3e Monoclonal Antibody (SP7)

Product Details	
Size	500 µL
Species	Human, Mouse, Pig, Rat
Published Species	Dog, Baboon, Rat, Pig, Non-human primate, Mouse, Human, Rhesus monkey
Expression System	Rabbit / IgG
Class	Monoclonal
Type	Antibody
Clone	SP7
Conjugate	Unconjugated
Immunogen	synthetic peptide KAKAKPVTRGAGA, corresponding to amino acids 156-168 of Human CD3 epsilon chain.
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	tissue culture supernatant diluted in TBS, pH 7.5, with 1% BSA
Contains	0.1% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_1956722

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1:1000	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	1:500	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1:150	23 Publications
Western Blot (WB)	1:200	1 Publication
Immunocytochemistry (ICC)	-	5 Publications
Immunohistochemistry (IHC)	-	228 Publications
Miscellaneous PubMed (Misc)	-	3 Publications

Product Specific Information

This antibody reacts with the intracytoplasmic portion of CD3 and stains human T cells in both the cortex and medula of the thymus and in peripheral lymphoid tissues. This antibody is suitable for staining normal and neoplastic T cells in formalin-fixed, paraffin embedded tissues. For tissue staining, antigen retrieval is suggested by boiling tissue sections in 10mM citrate buffer, pH 6.0 for 10 minutes followed by cooling at room temperature for 20 minutes.

This antibody is predicted to react with Sheep, Rabbit, Horse, Chicken, Cow, Cat, Dog, Baboon, and Woodchuck.

Recommended positive controls:

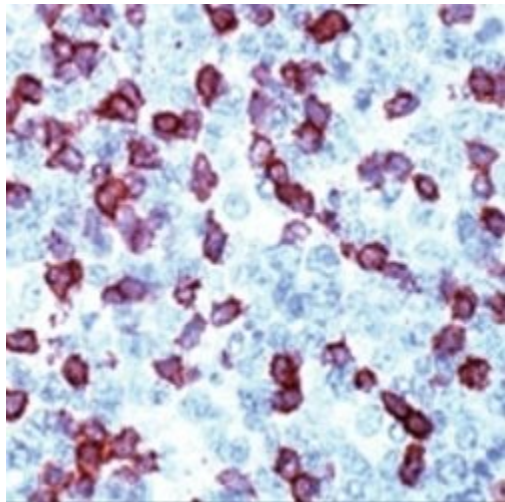
WB - Recombinant human CD3e protein, Jurkat whole cell lysate, Human, mouse and rat thymus tissue lysate|

IHC (P) - Pig and rat spleen tissue, human tonsil tissue, mouse epididymal fat pad and lymph node tissues, rat infarcted heart and spleen tissues

Flow Cytometry - Human peripheral blood lymphocytes, Jurkat cells

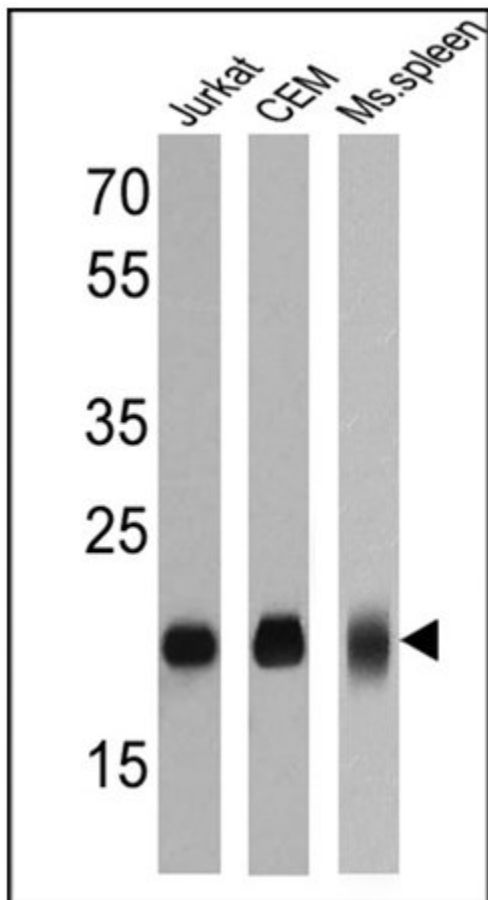
IHC (F) - Mouse brain tissue

Product Images For CD3e Monoclonal Antibody (SP7)



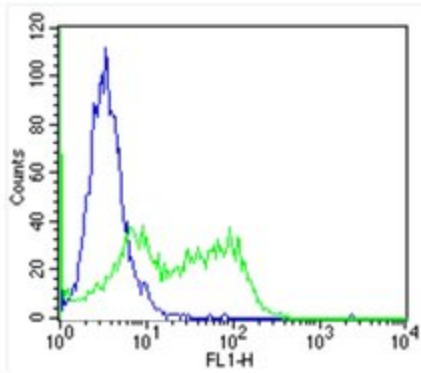
CD3e Antibody (MA1-90582) in IHC (P)

Immunohistochemical analysis of CD3e in formalin-fixed, paraffin-embedded human tonsil tissue using a CD3e monoclonal antibody (Product # MA1-90582). Detection was performed with a peroxidase-conjugate and AEC chromagen. Note cell membrane staining of T cells.



CD3e Antibody (MA1-90582) in WB

Western blot analysis of CD3E was performed by loading 25 μ g of Jurkat (Lane 1), CEM (Lane 2) and mouse spleen (Lane 3) cell lysates onto an SDS polyacrylamide gel. Proteins were transferred to a PVDF membrane and blocked at 4°C overnight. The membrane was probed with a CD3E monoclonal antibody (Product # MA1-90582) at a dilution of 1:50 overnight at 4°C, washed in TBST, and probed with an HRP-conjugated secondary antibody for 1 hr at room temperature in the dark. Chemiluminescent detection was performed using Pierce ECL Plus Western Blotting Substrate (Product # 32132). Results show a band at approx. 20 kDa.



Cell: Jurkat

Dilution : 1/2

Theory location: Membrane

CD3e Antibody (MA1-90582) in Flow

Flow cytometry analysis of CD3E in Jurkat cells (green) compared to an isotype control (blue). Cells were harvested, adjusted to a concentration of $1-5 \times 10^6$ cells/mL, fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with a CD3E monoclonal antibody (Product # MA1-90582) at a dilution of 1:2 for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated secondary antibody and re-suspended in PBS for FACS analysis.

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Immunohistochemistry (228)

Journal of liver

The p53 Codon 72 Polymorphism Modifies the Cellular Response to Inflammatory Challenge in the Liver.

"MA1-90582 was used in immunohistochemistry to use a knock-in mouse model to study the effects of p53 codon polymorphism on hepatic responses to different forms of inflammatory stress"

Authors: Leu JI, Murphy ME, George DL

Species
Mouse

Dilution
Not Cited

Year
2020

Journal of biomedical science

Hypoxia and therapeutic treatment of EV-A71 with an immune modulator TLR7 agonist in a new immunocompetent mouse model.

"MA1-90582 was used in Immunohistochemistry to show, using a new wt-129 mouse model, that timely treatment with compound R837 (a TLR7 immune modulator) via oral or intraperitoneal routes, rescued the hypoxia, limb paralysis, and death at a high therapeutic efficacy."

Authors: Liou AT, Liao CC, Chou SF, Chang YS, Chang CS, Shih C

Species
Mouse

Dilution
Not Cited

Year
2019

[View more IHC references on thermofisher.com](#)

Immunohistochemistry (Paraffin) (23)

Frontiers in immunology

Natural Killer Group 2D Ligand Depletion Reconstitutes Natural Killer Cell Immunosurveillance of Head and Neck Squamous Cell Carcinoma.

"MA1-90582 was used in Immunohistochemistry on paraffin embedded tissues to propose adsorption apheresis of sNKG2DLs as a future preconditioning strategy to improve the efficacy of autologous and adoptively transferred immune cells in cellular cancer immunotherapy."

Authors: Weil S, Memmer S, Lechner A, Huppert V, Giannattasio A, Becker T, Müller-Runte A, Lampe K, Beutner D, Quaaas A, Schubert R, Herrmann E, Steinle A, Koehl U, Walter L, von Bergwelt-Baildon MS, Koch J

Species
Human

Dilution
Not Cited

Year
2019

Nature communications

Acquired cancer resistance to combination immunotherapy from transcriptional loss of class I HLA.

"MA1-90582 was used in Immunohistochemistry on paraffin embedded tissues to report single cell RNA sequencing identified dynamic transcriptional suppression of the specific HLA genes presenting the targeted viral epitope in the resistant tumor as a consequence of intense CD8-mediated immunologic pressure; this is distinguished from genetic HLA-loss by its reversibility with drugs."

Authors: Paulson KG, Voillet V, McAfee MS, Hunter DS, Wagener FD, Perdicchio M, Valente WJ, Koelle SJ, Church CD, Vandeven N, Thomas H, Colunga AG, Iyer JG, Yee C, Kulikauskas R, Koelle DM, Pierce RH, Bielas JH, Greenberg PD, Bhatia S, Gottardo R, Nghiem P, Chapuis AG

Species
Human

Dilution
1:400

Year
2018

[View more IHC \(P\) references on thermofisher.com](#)

More applications with references on thermofisher.com

IHC (F) (1) Flow (1) Misc (3) ICC (5) WB (1)

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