TdT

CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	mouse anti human
CLONE NAME:	41A
PROTEIN:	DNA nucleotidylexotransferase
PROTEIN WEB:	http://www.ncbi.nlm.nih.gov/protein/26007035
ANTIGEN USED:	HIS-TDT recombinant protein
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG2a
SPECIES REACTIVITY:	Human
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze
COMMERCIALIZED BY:	Abcam and Biolegend

DESCRIPTION

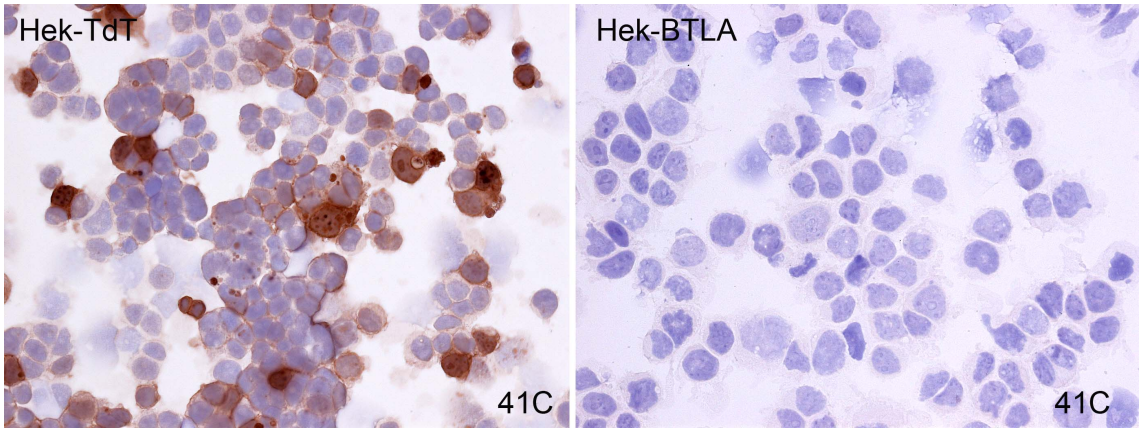
Template-independent DNA polymerase which catalyzes the random addition of deoxynucleoside 5'-triphosphate to the 3'-end of a DNA initiator. One of the in vivo functions of this enzyme is the addition of nucleotides at the junction (N region) of rearranged Ig heavy chain and T-cell receptor gene segments during the maturation of B- and T-cells.

REFERENCES

Susan McClory, Tiffany Hughes, Aharon G Freud, Edward L Briercheck, Chelsea Martin, Anthony J Trimboli, Jianhua Yu, Xiaoli Zhang, Gustavo Leone, Gerard Nuovo, Michael A Caligiuri. Evidence for a stepwise program of extrathymic T cell development within the human tonsil. The Journal of Clinical Investigation. 2 April 2012.

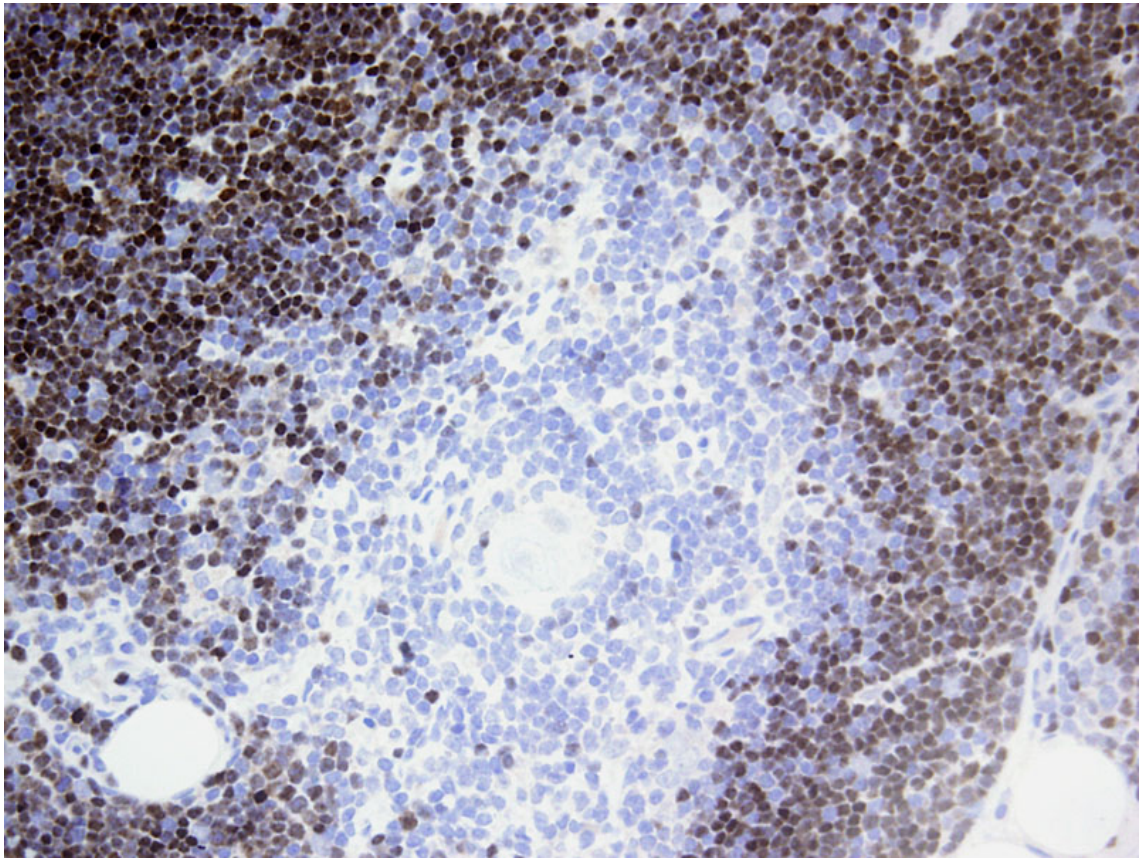
APPLICATIONS

IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytospins									
Recommended	41C	Neat supernatant							
Paraffin tissue									
Recommended	41C	1:10	Supernatant			Thymus			
Immunofluorescence									
Recommended	41C	1:50	Supernatant						

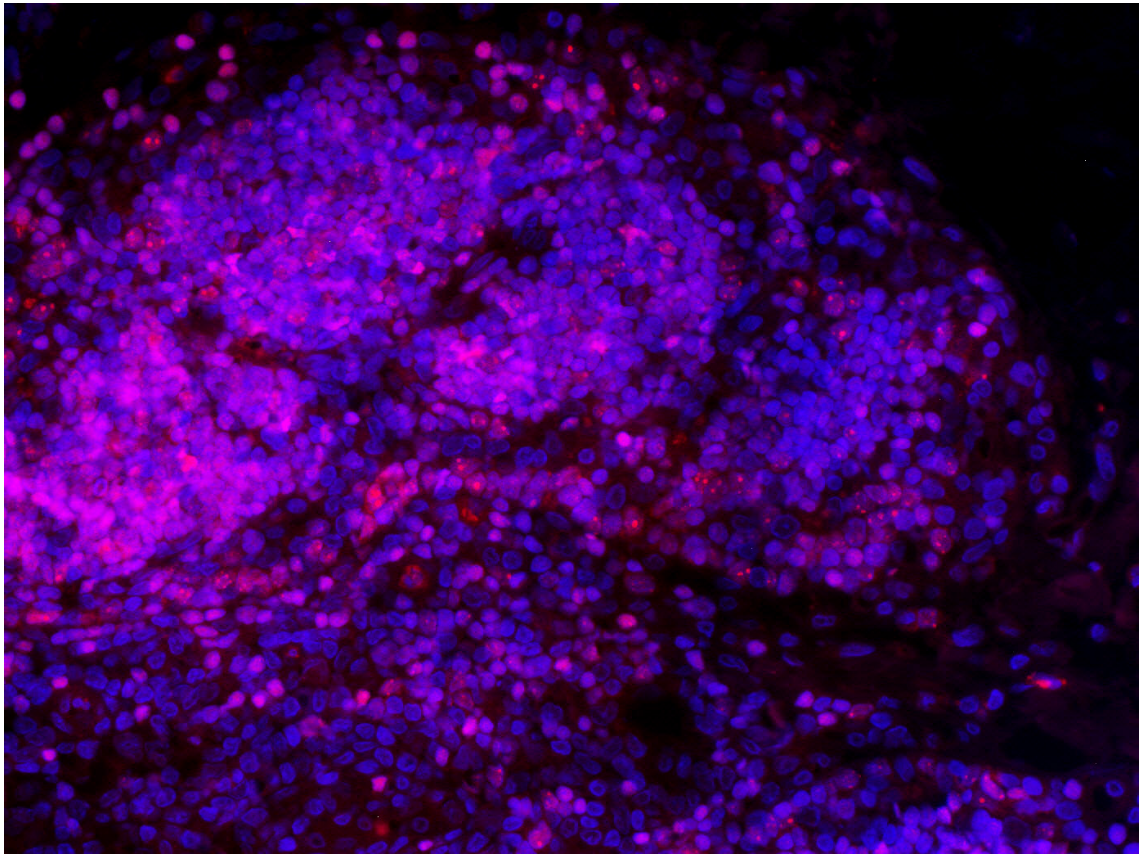


41C mAb in HEK293T-TdT transfected cells.

To confirm that 41C mAb recognized human TdT protein, immunohistochemistry on frozen cytospins preparations of human TdT expressed in HEK293T was performed. Cytospin preparation of human BTLA protein was used as a negative control.



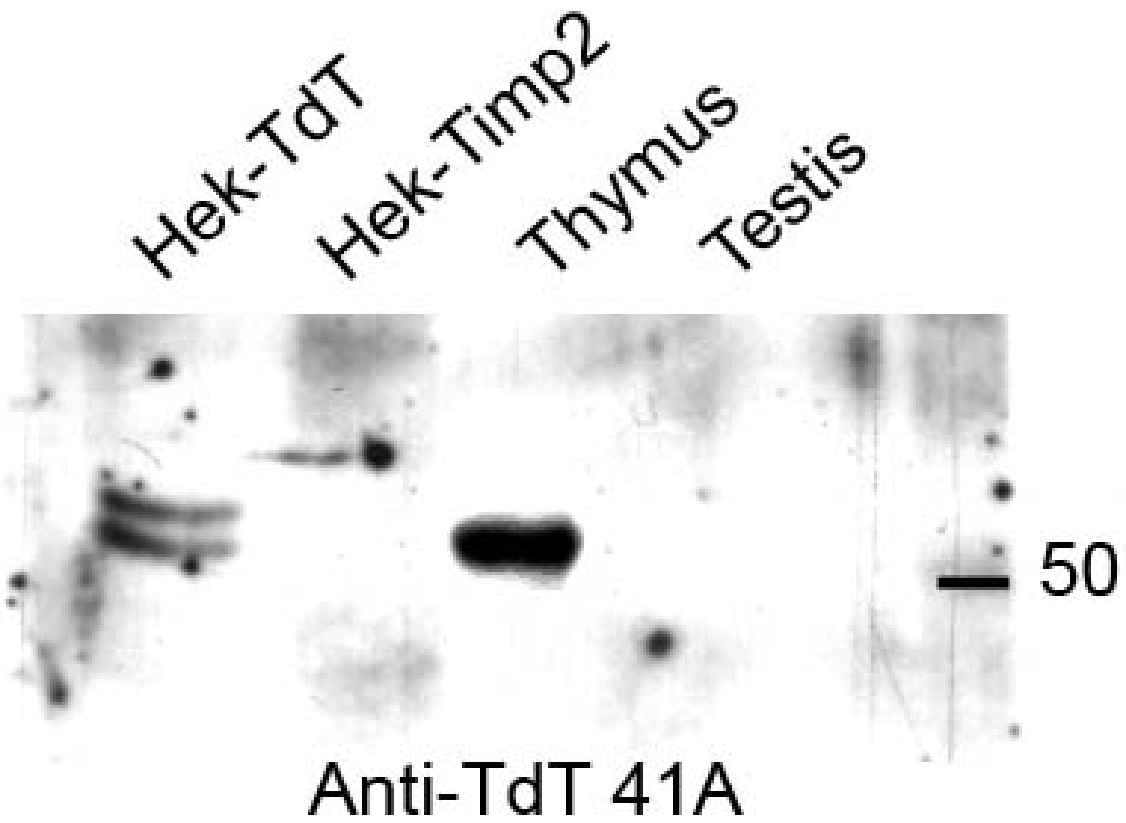
41C mAb in human thymus tissue.



41C mAb can be used to detect human TDT protein by IF.

TdT (red) and DAPI (blue) in human thymus.

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								
Recommended	41C	Neat supernatant		Thymus		58kDa	58kDa	
Immunoprecipitation								



41C mAb is able to detect human TdT protein by WB

Lane 1 Hek-TdT (30?g) (+)

Lane 2 Hek-Timp2 (30?g) (-)

Lane 3 Human thymus (100?g) (+)

Lane 4 Human testis (100?g) (-)