

**Mouse Anti-HTLV-1 Tax [1A3]: MC0109, MC0109RTU7**

**Intended Use:** For Research Use Only

**Description:** The Human T-lymphotropic virus Type I (HTLV-1) is a human RNA retrovirus that causes T-cell leukemia/lymphoma (ATL) in adults and may also be involved in certain demyelinating diseases, including tropical spastic paraparesis. The HTLV-1 genome is diploid, composed of two copies of a single-stranded RNA virus whose genome is copied into a double-stranded DNA form that integrates into the host cell genome, at which point the virus is referred to as a provirus. The glycoproteins encoded by the env gene of HTLV-1 are essential for interaction with an unidentified receptor on the surface of target cells and play a crucial role in the infection process. Encoded by HTLV-1 Tax is a phospho-oncoprotein that functions as a transcriptional activator. Tax has the ability to modulate the expression and function of many cellular genes and has been crucial to understanding the HTLV-1-mediated transformation of cells. In activating cellular gene expression, Tax impinges upon several cellular signal-transduction pathways, including the CREB/ATF and NFκB pathways. In addition, Tax deregulates the expression of downstream genes, which mediate cell cycle control.

**Specifications:**

Clone: 1A3  
 Source: Mouse  
 Isotype: IgG2a  
 Reactivity: HTLV-1  
 Localization: HTLV-1  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, ICC/IF, WB  
 Package:

Description	Catalog No.	Size
HTLV-1 Tax Concentrated	MC0109	1 ml
HTLV-1 Tax Prediluted	MC0109RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Expressed Tax protein in HTLV-1 infected tissue  
 Concentrated Dilution: 50-500  
 Pretreatment: None  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.

**References:**

1. Cytokine and growth factor expression by HTLV-1 Lck-tax transgenic cells in SCID mice. Watters KM, et al. AIDS Res Hum Retroviruses 26:593-603, 2010.
2. The PDZ domain binding motif (PBM) of human T-cell leukemia virus type 1 Tax can be substituted by heterologous PBMs from viral oncoproteins during T-cell transformation. Aoyagi, T; et al. VIRUS GENES 40:193-199, 2010.
3. Recombinant Human T-Cell Leukemia Virus Types 1 and 2 Tax Proteins Induce High Levels of CC-Chemokines and Downregulate CCR5 in Human Peripheral Blood Mononuclear Cells. Barrios, CS; et al. VIRAL IMMUNOLOGY 24:429-439, 2011.
4. Ro52-mediated monoubiquitination of IKK{beta} down-regulates NF-κB signalling. Wada, K. et al. Journal of biochemistry. 146: 821-32, 2009.

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