

## CD8a

CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	rat anti mouse
CLONE NAME:	OTO94A
PROTEIN:	mouse T-cell surface glycoprotein CD8 alpha chain
PROTEIN WEB:	<a href="http://www.uniprot.org/uniprot/P01731">http://www.uniprot.org/uniprot/P01731</a>
ANTIGEN USED:	Transfected cells with pCMV6-MYC-DDK-mCD8a
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG2c
SPECIES REACTIVITY:	mouse
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze

### DESCRIPTION

Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class I molecule:peptide complex. The antigens presented by class I peptides are derived from cytosolic proteins while class II derived from extracellular proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class I proteins presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T-lymphocytes (CTLs). This mechanism enables CTLs to recognize and eliminate infected cells and tumor cells. In NK-cells, the presence of CD8A homodimers at the cell surface provides a survival mechanism allowing conjugation and lysis of multiple target cells. CD8A homodimer molecules also promote the survival and differentiation of activated lymphocytes into memory CD8 T-cells (obtained from Uniprot).

### APPLICATIONS

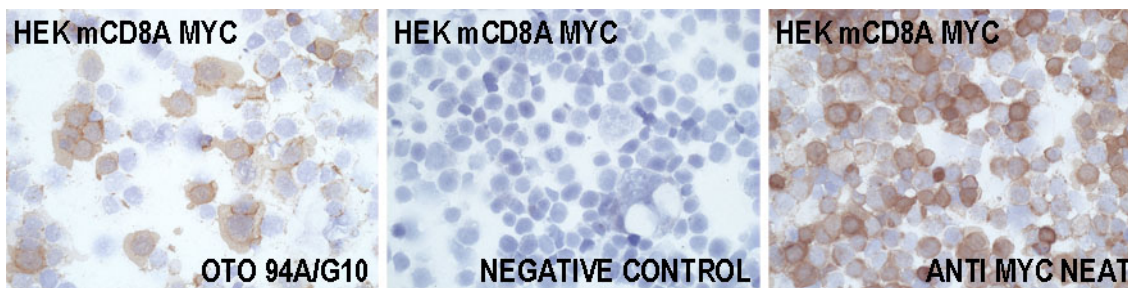
IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
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## Frozen tissue and cytopins

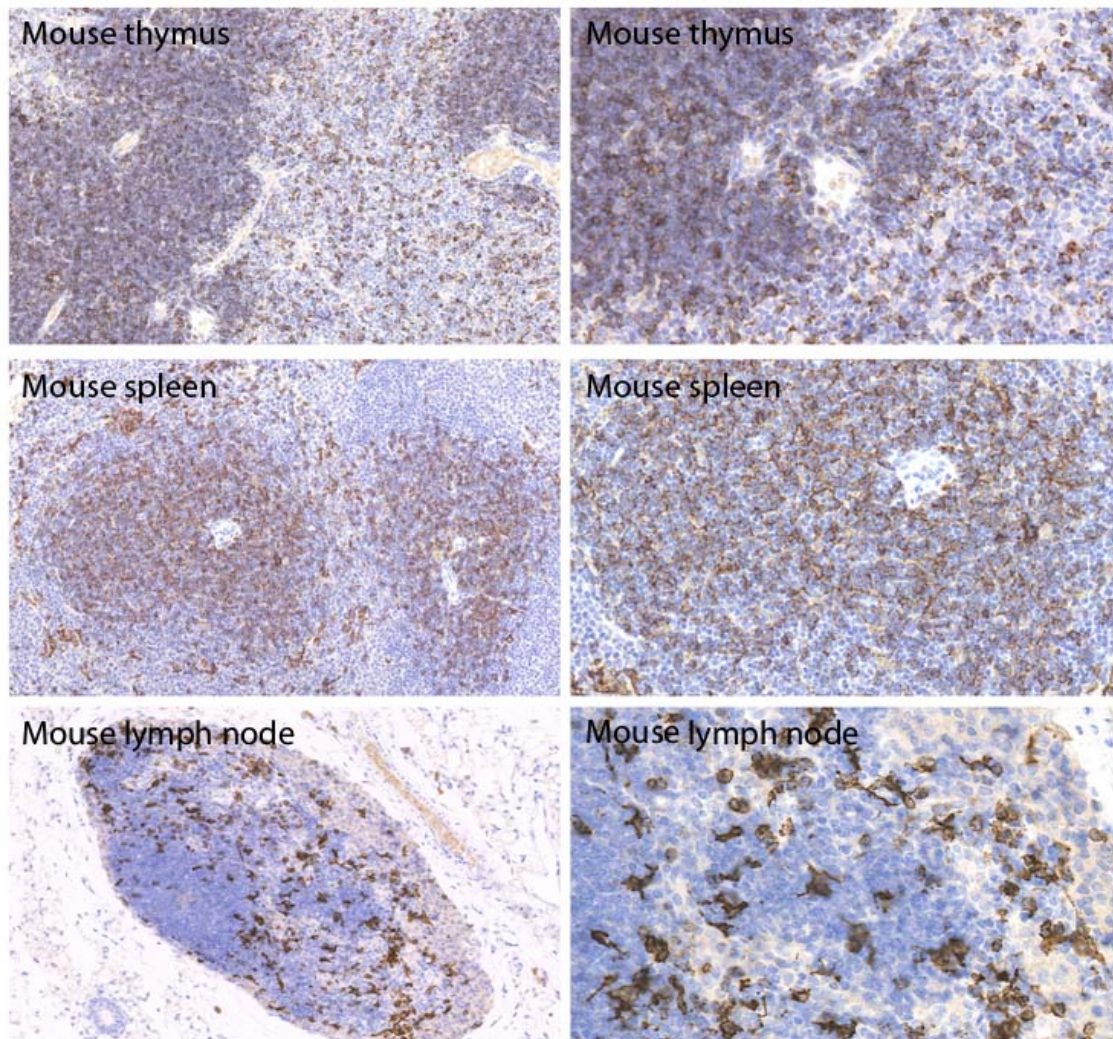
## Paraffin tissue

Recommended	OTO9 4A	1:200	supernatant			mouse spleen		membrane	
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## Immunofluorescence


**CD8a antibody (OTO94A) in HEK transfected cells.**

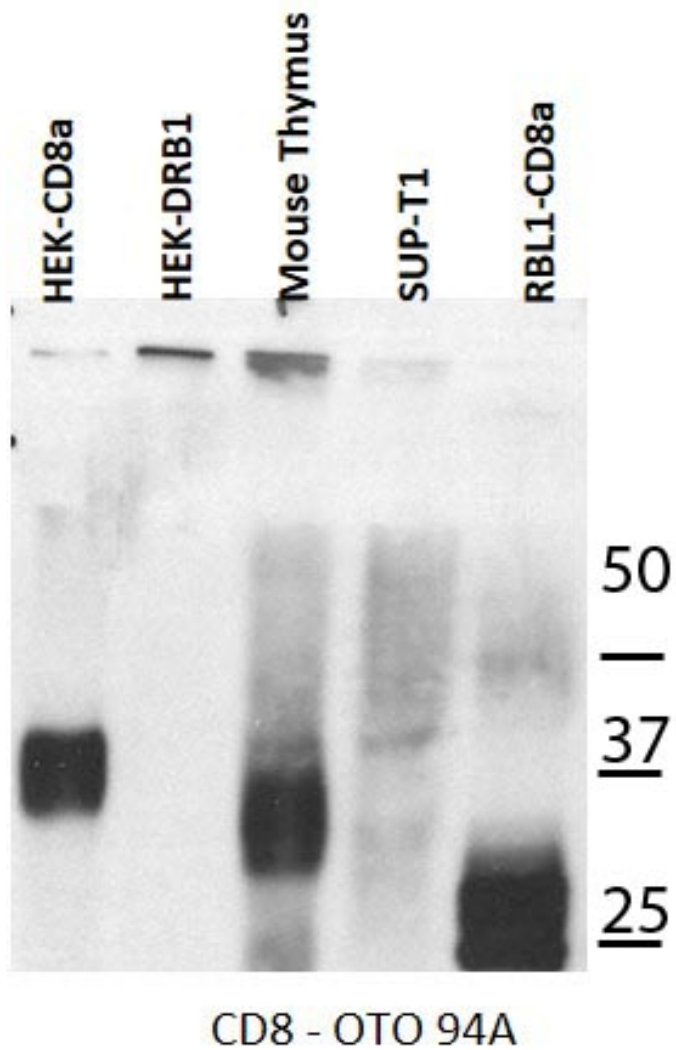
Validation of OTO94A monoclonal antibody in transfected cells. Membrane staining on frozen cytopsin preparations of transfected HEK293T-MYC-mCD8a cells using antibody OTO94A. Anti-myc antibody was used as positive control.



**OTO94A mAb staining in mouse lymphoid tissues.**

## Monoclonal Antibodies Catalogue

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species
Western Blotting								
Recommended	OTO94A	undiluted supernatant		mouse thymus		27kDa	27kDa	
Immunoprecipitation								



**Western Blotting of anti-mCD8a (OTO94A) using different cell extracts.**

WB analysis of cell line samples and mouse thymus extract for mCD8a.

Lane 1 HEK-MYC-mCD8a transfected cells (10ug) (+)

Lane 2 HEK-DRB1 transfected cells (10ug) (-)

Lane 3 Mouse thymus extract (100ug) (+)

Lane 4 SUP-T1 human cell line (100ug) (-)

Lane 5 RBL-1-mCD8a transfected cells (10ug) (+)