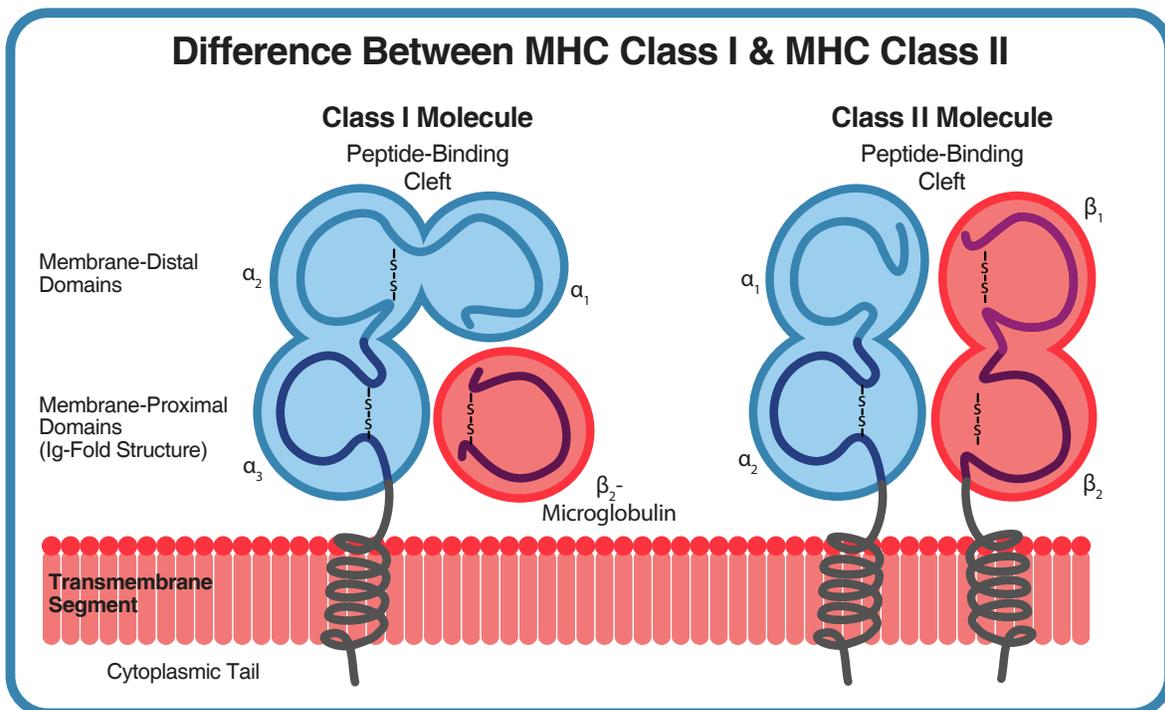


Human & Mouse MHC Antibodies

Understanding the Major Histocompatibility Complex

The Major Histocompatibility Complex (MHC) is the immune system's "identity badge" and surveillance platform. These specialized glycoproteins reside on the cell membrane, allowing the body to distinguish between "self" and "foreign" invaders. By displaying peptide fragments on the cell surface, MHC molecules act as a bridge between innate and adaptive immunity, signaling T cells to act against pathogens and tumors.



MHC Class I: The Internal Security Guard

Where it's found: On the surface of all nucleated cells and platelets.

What it does: It samples the inside of the cell. If a cell is healthy, MHC Class I displays "self-peptides." If a cell is infected by a virus or becomes cancerous, it displays foreign fragments that alert CD8+ Cytotoxic T cells to destroy the cell.

The Mechanism:

- **Structure:** A polymorphic alpha chain paired with beta-microglobulin.
- **Genetic IDs:** In humans, these are HLA-A, -B, and -C. In mice, they are H2-K, -D, and -L.

MHC Class II: The Professional Sentinel

Where it's found: Exclusively on Professional Antigen-Presenting Cells (APCs) like Dendritic cells, Macrophages, and B cells.

What it does: It samples the outside of the cell. These cells "eat" pathogens (endocytosis), break them down, and present the fragments to CD4+ Helper T cells. This triggers a cascade that activates B cells for antibody production and coordinates the broader immune response.

The Mechanism:

- **Structure:** A heterodimer of alpha and beta subunits that forms an open-ended groove to hold longer peptide sequences.
- **Genetic IDs:** In humans, these are HLA-DP, -DQ, and -DR. In mice, they are I-A and I-E.

Leinco's MHC Antibody Products

Human MHC Antibody Products

Target	Clone	Specificity
MHC-I	W6/32	HLA-A,B,C
MHC-I	BB7.1	HLA-B7
MHC-I	BB7.21	HLA-A2, B7
MHC-I	BB7.6	HLA-A2, B7
MHC-I	DT-9	HLA-C
MHC-II	L243	HLA-DR
MHC-II	B7/21	HLA-DP
MHC-II	1a3	HLA-DQ

Mouse MHC Antibody Products

Target	Clone	Specificity
MHC-I	A4C8.1-Do9	H-2Kd
MHC-I	AF6-88.5	H-2Kb
MHC-I	Y-3	H-2Kb
MHC-I	28-14-8S	H-2Db
MHC-I	15-3-1S	H-2Kk, H-2Dk
MHC-I	M1/42.3.9.8	H-2
MHC-I	SF1.1.10	H-2Kd
MHC-I	34-1-2S	H-2Kd, H-2Dd
MHC-II	M5/114.15.2	I-A/I-E
MHC-II	14-4-4S	I-Ek/RT1-D
MHC-II	10-3.6.2	I-Ak, I-Ar, I-Af, I-As, I-Ag7
MHC-II	Y-3P	I-A

Conjugates include enzyme-labeled Biotin and HRP & fluorescent-labeled APC, PE, and a complete spectrum of fluorescent dyes.



Scan the QR code to see our full catalog of MHC Antibodies

Bulk sizes, custom concentrations, custom packaging and custom conjugation services are available on request.