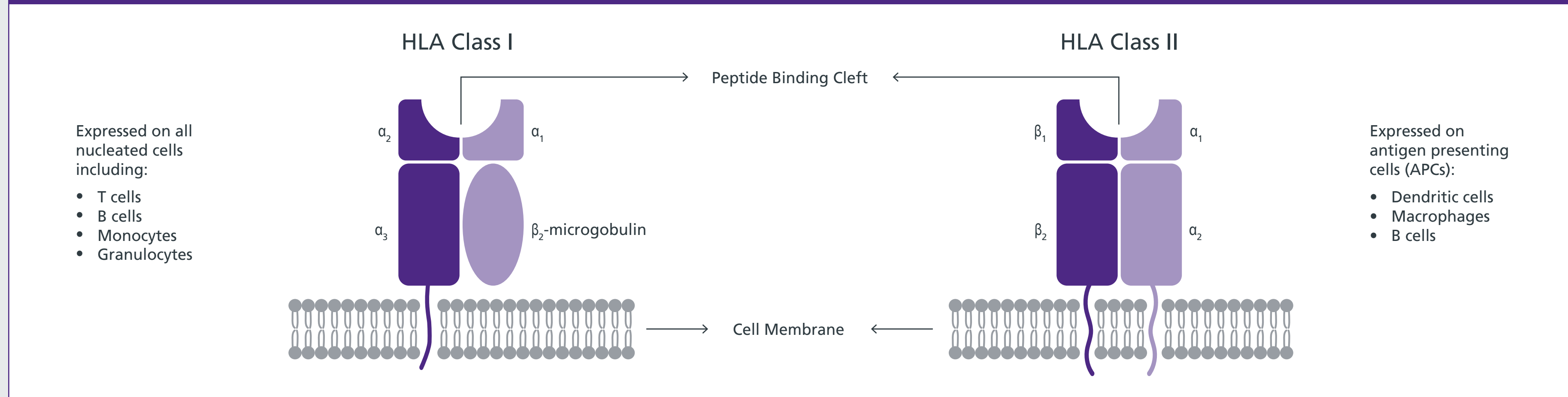
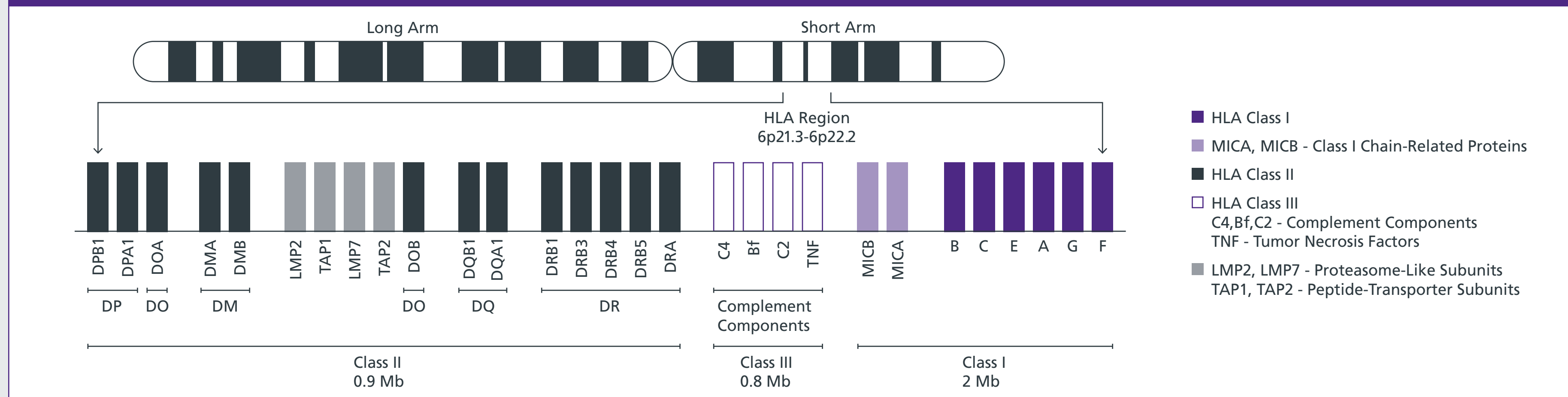


The Human Leukocyte Antigen (HLA) Complex

HLA Complex



HLA Genes on Chromosome 6



Nomenclature

HLA-DRB4*01:03:01:02N

Hyphen used to separate gene name from HLA prefix

Separator

Field Separators

HLA Prefix

Gene

Field 1 Allele Group

Field 2 Specific HLA Protein

Field 3 used to show a synonymous DNA substitution within the coding region

Field 4 used to show differences in a non-coding region

Suffix used to denote changes in expression

SUFFIX	EXPRESSION STATUS
L	Low cell surface expression when compared to normal levels.
S	Expressed as a soluble, secreted molecule but is not present on the cell surface.
C	Alleles that produce proteins that are present in the cytoplasm and not on the cell surface.
A	Aberrant expression where there is some doubt as to whether a protein is actually expressed.
Q	Expression of an allele is questionable , given that the mutation seen in the allele has been shown to affect normal expression levels in other alleles.
N	Alleles that have been shown not to be expressed (null).

HLA Typing and Crossmatching

PURPOSE	ASSAYS	TECHNIQUE	PURIFIED LYMPHOCYTES IMPROVE ASSAY?	STEMCELL TECHNOLOGIES CELL ISOLATION KITS (CATALOG #)
Determine HLA Type	DNA-Based HLA Typing	<ul style="list-style-type: none"> Sequence-Specific Oligonucleotide Probes (SSOP) Sequence-Specific Primer (SSP) Next Generation Sequencing (NGS) 	NO	Not Applicable
	Serological HLA Typing	<ul style="list-style-type: none"> Typing Trays Microcytotoxicity Assays 	YES	T Cells: 15061, 15061HLA ¹ B Cells: 15064, 15064HLA ¹
Detect Donor Specific Antibodies (DSA)	Patient-Donor Crossmatch	<ul style="list-style-type: none"> Flow Cytometry Crossmatch (FCXM) Assay Complement-Dependent Cytotoxicity (CDC) Crossmatch Assay 	YES	Total Lymphocytes: 19655, 19961HLA T Cells: 19671, 89671 ² B Cells: 19684, 89684 ²
	Anti-HLA Antibody Screening	<ul style="list-style-type: none"> Solid Phase Assays (Luminex®) Enzyme-Linked Immunosorbent Assay (ELISA) 	NO	Not Applicable

1. This kit has been CE-marked as a Class I In Vitro Diagnostic (IVD) device in the European Union according to the 98/79/EC In Vitro Diagnostic Device Directive and complies with its requirements.
2. This kit carries the CE mark and is available as a Class I In Vitro Diagnostic (IVD) device in the European Union and Australia. To learn more about the regulatory status of this product in your specific region, contact info@stemcell.com.

References: 1. Howell WM et al. (2010) J Clin Pathol 63(5): 387-90. | 2. Lima-Junior J da C & Pratt-Riccio LR. (2016) Front Immunol 7: 13. | 3. Marsh SG et al. (2010) Tissue Antigens 75(4): 291-455. | 4. Robinson J et al. (2015) Nucleic Acids Res 43 (Database issue): D423-31. | 5. Sasazuki T et al. (2016) Adv Immunol 129: 175-249. | 6. Tinckam KJ. (2012) In: Chandraker A, MH Sayegh, AK Singh (Eds.) Core Concepts in Renal Transplantation. Boston, MA: Springer US: pp21-42. | 7. Zhang GL et al. (2014) Front Immunol 5: 597.

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