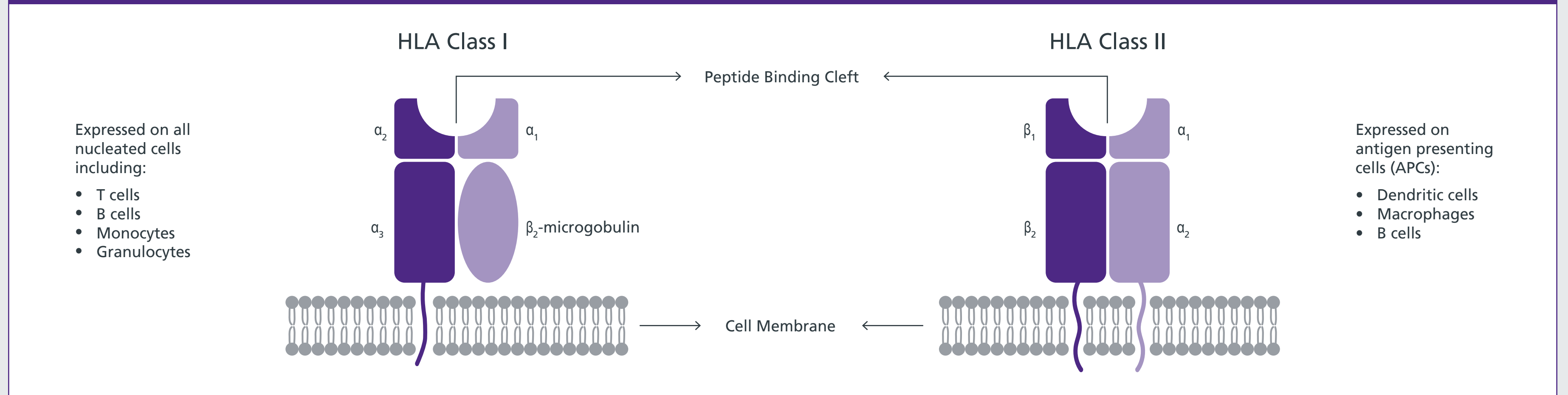
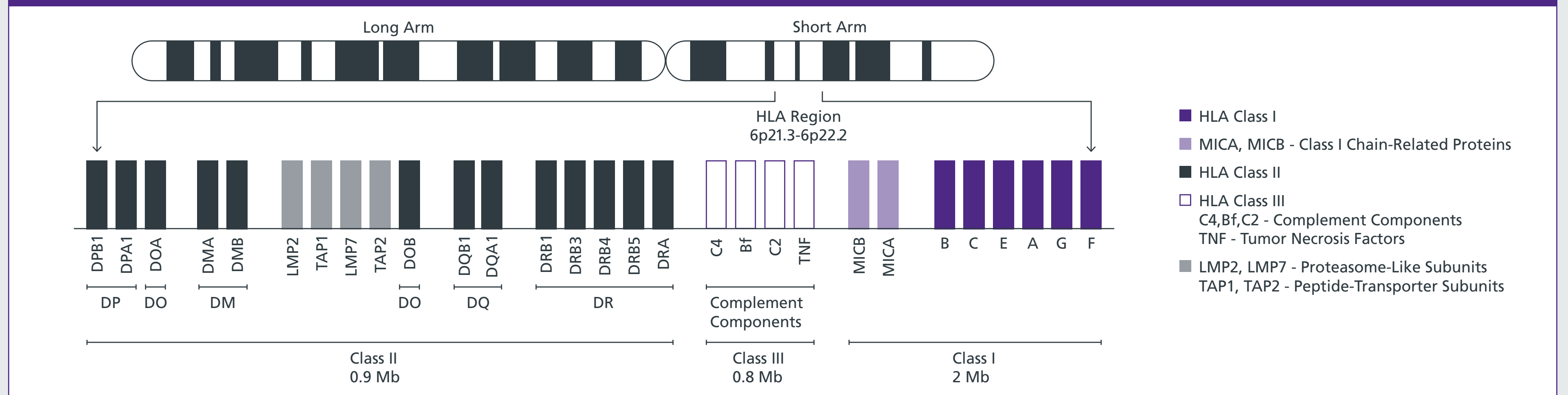


The Human Leukocyte Antigen (HLA) Complex

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 B Cells: 15064, 15064HLA
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 B Cells: 19684, 89684
	Anti-HLA Antibody Screening	<ul style="list-style-type: none"> Solid Phase Assays (Luminex®) Enzyme-Linked Immunosorbent Assay (ELISA) 	NO	Not Applicable

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