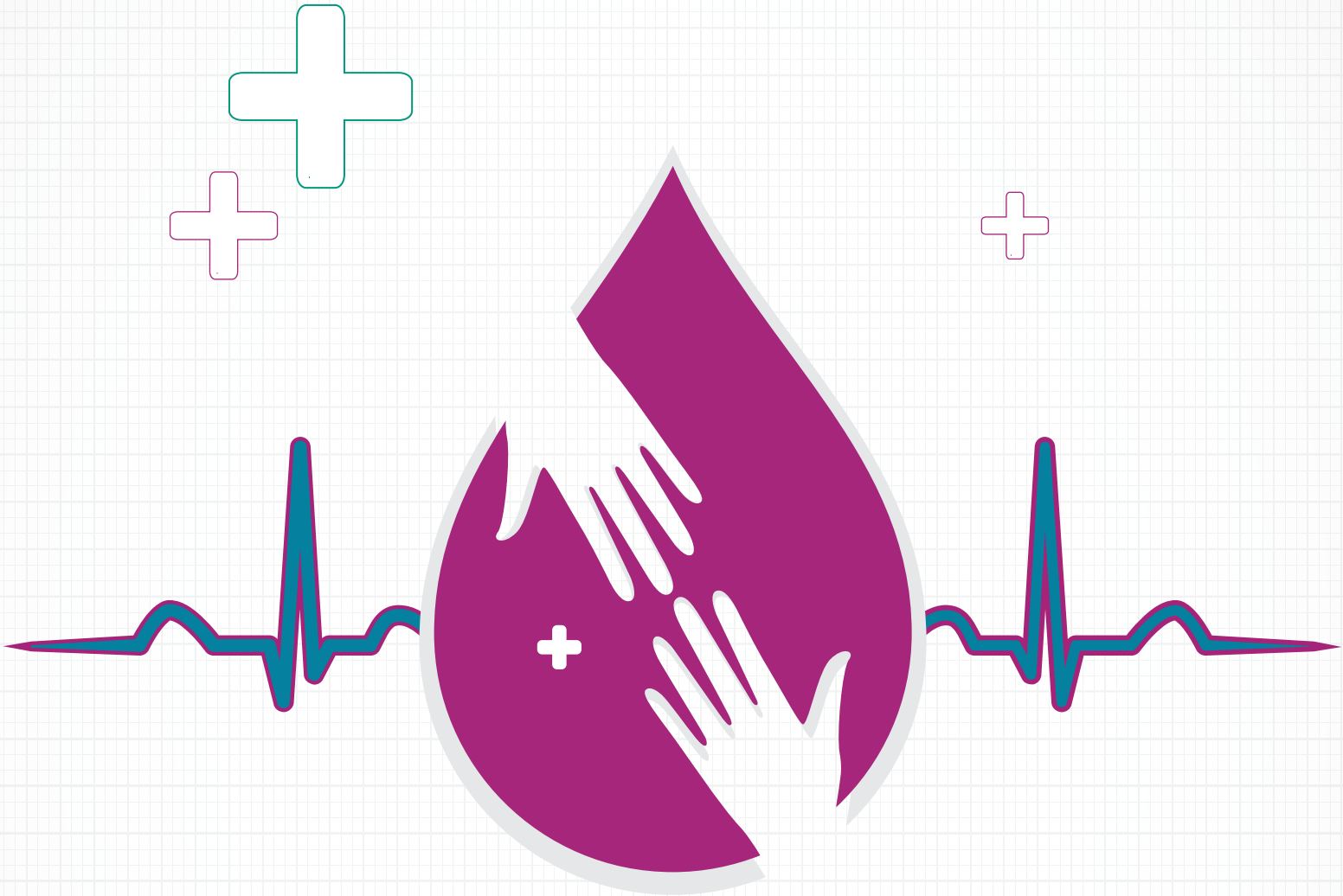
LifeCell® Diagnostics is now mfine /diagnostics



Ensure Precise selection of Donor with Crossmatch Testing

CDC-Cross Match
(Complement Dependent Cytotoxicity)

- This test is utilized to detect preformed antibodies in the serum of the transplant recipient against the donor's lymphocytes.
- A positive cross-match against donor's T- lymphocytes is a strong contraindication to transplantation due to the high risk of hyper-acute rejection.
- Preformed antibodies increase the chances of an immunological failure of the allograft by causing positive crossmatches and, thereby, result in the exclusion

T & B Cell Flow Crossmatch

- Cytolytic flow cytometry crossmatch is a novel method that allows for detection of even very low concentrations of preformed antibodies present in the patient serum to the donor lymphocytes
- Cytometry cross matching is more reliable than the CDC cross matching as it is not complement dependent like CDC testing and it specifically detects T and B cells binding with IgG alloantibodies
- In patients undergoing dialysis, the sample needs to be collected after three days of last dialysis. Cross matching samples need to be collected after three weeks of any blood transfusion, in case of a recent blood transfusion history

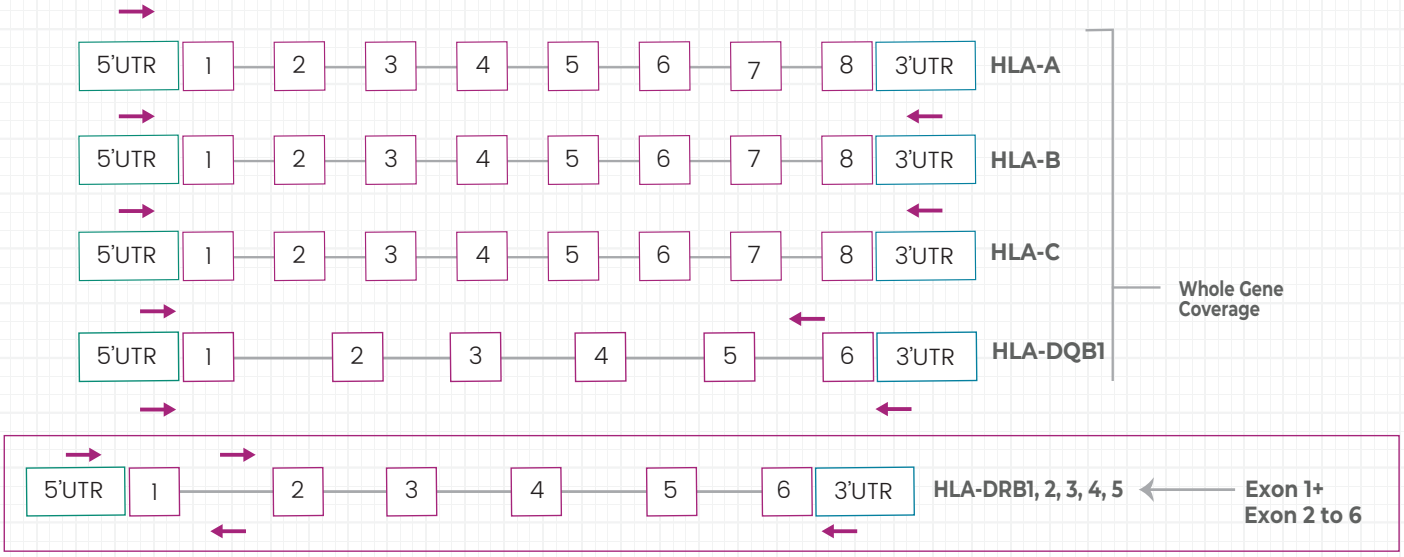
Test Ordering Information

Test Code	Test Name	Methodology	Specimen Type	TAT
CDCCROSS01	CDC Crossmatch (T cell & B cell) with DTT & AHG Augmentation, Recipient and Donor	Complement Dependent Cytotoxicity with DTT treatment	RECIPIENT: 3 mL (2 mL min,) serum from 1 SST, Collect specimen preferably 48 hours after dialysis, DONOR: 12 mL (10 mL min,) whole blood in 2 Yellow Top (ACD) tubes	Next Day
FLOWCROSS01	T & B Cell Flow Crossmatch	Flow Cytometry	RECIPIENT: 3 mL (2 mL min,) serum from 1 SST, Collect specimen preferably 48 hours after dialysis, DONOR: 12 mL (10 mL min,) whole blood in 2 Yellow Top (ACD) tubes	Next Day

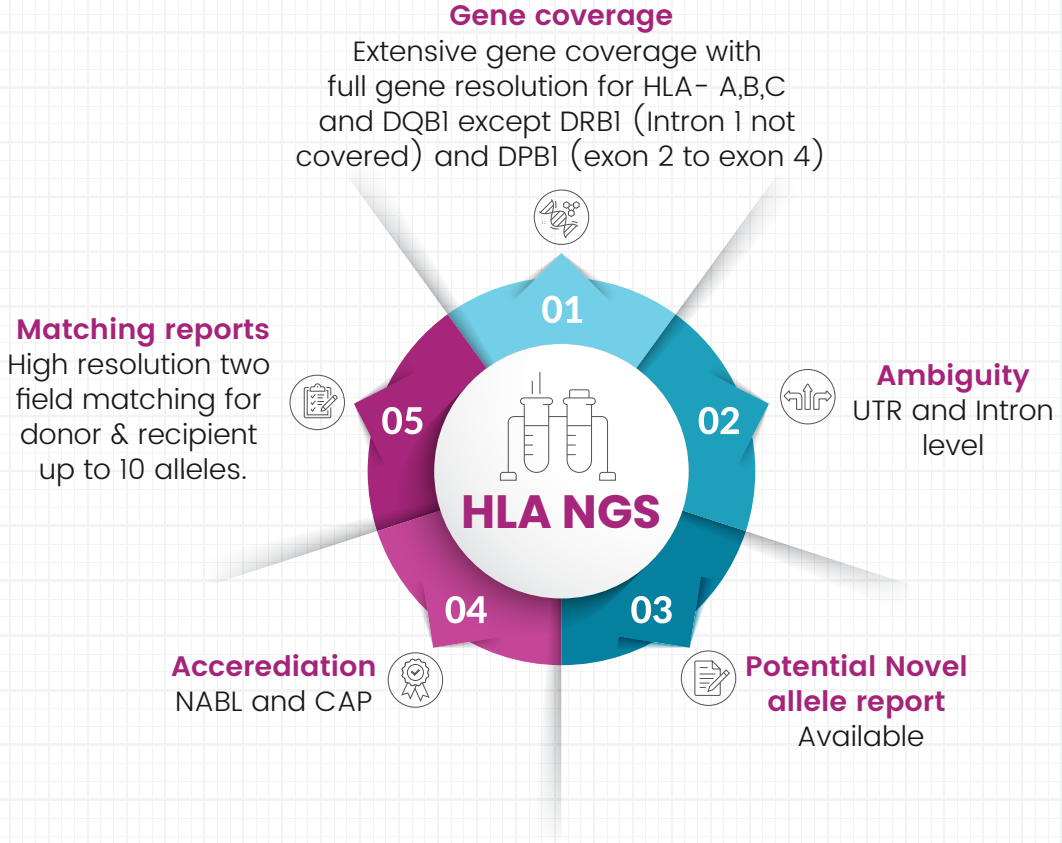
HLA Typing- High resolution

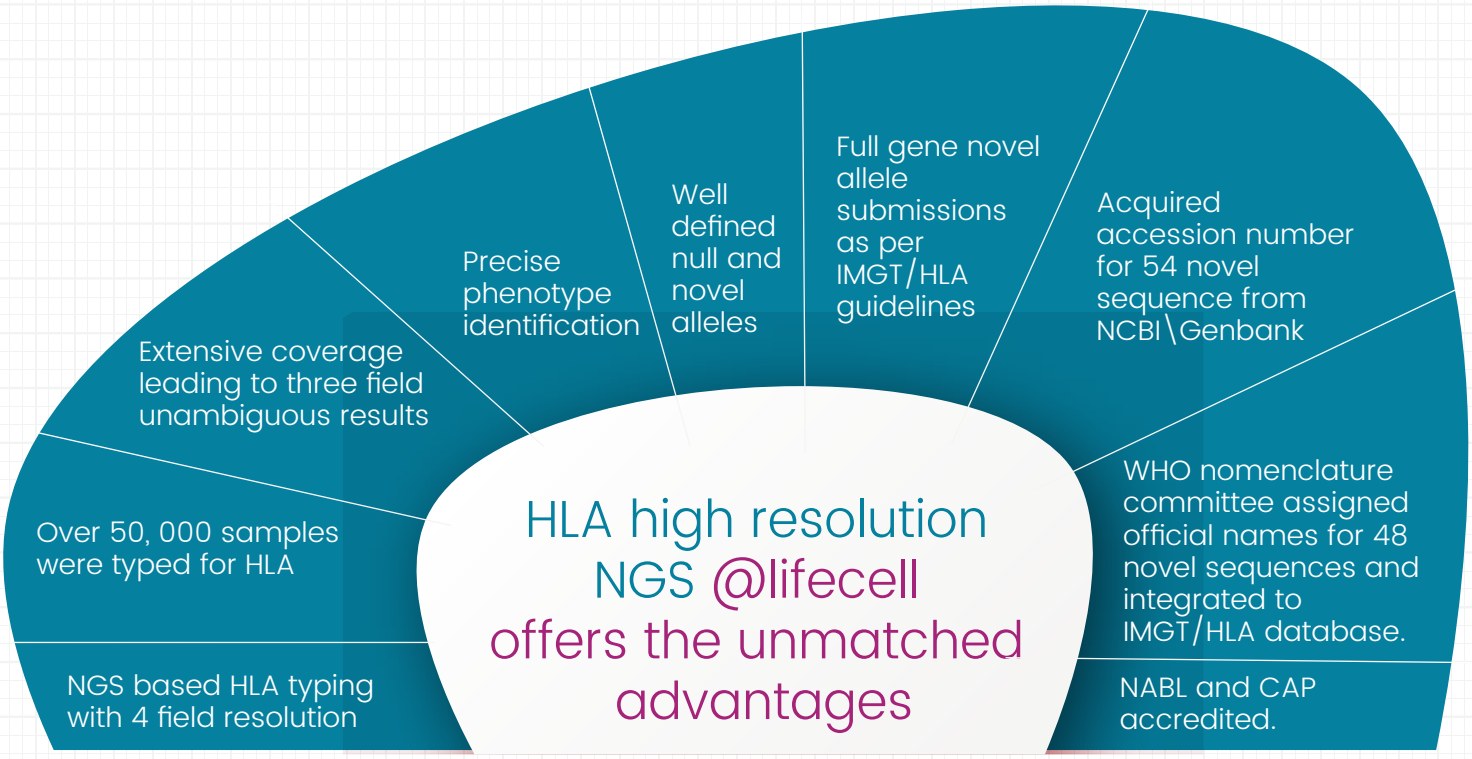
High resolution typing at 10 Loci

- High throughput ultra high resolution HLA typing for HLA loci A, B, C, DRB1 and DQB1 (long range PCR)
- Full gene coverage except DRB1 (Intron 1 not sequenced) using Illumina platform.
- Optimized long range PCR reactions with in-depth Next generation sequencing using Illumina platform
- High quality HLA data analysis using software that calls alleles with three different algorithms.
- Gene coverage for sequencing: Class I (A, B, C) – Whole gene, Class II (DQB1) – Whole gene & Class II (DRB1) - Whole gene (Except intron1), Class II (DPB1) - Exon 2 to Exon 4



Why Choose LIfecell's HLA NGS over others?





Report Illustration

HLA Typing High Resolution Result

Recipient Details

Name: Master. ID_DUMMY Gender: Male Age: 10 Years CRM: 220420610355 Lab ID: 41422069	Specimen: Peripheral Venous Blood Sample quality/quantity: Adequate Collected on: 27/07/2022 21:00 Received on: 30/07/2022 17:00 Report Date: 09/08/2022 18:30	Test: HLA Typing Clinician: Dr. S P YADAV Hospital: MEDANTA HOSPITAL City: GURGAON

Recipient Results

Blood group & Rh typing : Not Available
Typing Status : Complete
Null allele resolution status : Not Applicable
#Novel alleles are represented with XX in second and third field

Locus	HLA-A*	HLA-B*	HLA-C*	HLA-DRB1*	HLA-DQB1*
Allele 1	24:02:01:01	07:05:01:01	12:03:01:01	03:01:01:03	02:01:01:01
Allele 2	29:01:01:01	38:01:01:01	15:05:02:01	14:01:01	05:03:01:01

Donor Details

Name: Baby. ID_DUMMY Gender: Female Age: 4 Years CRM: 220420610356 Lab ID: 41422071	Specimen: Peripheral Venous Blood Sample quality/quantity: Adequate Collected on: 27/07/2022 21:00 Received on: 30/07/2022 17:00 Report Date: 09/08/2022 18:30	Test: HLA Typing Clinician: Dr. S P YADAV Hospital: MEDANTA HOSPITAL City: GURGAON

Donor Results

Relation as per TRF : Sister, Blood group & Rh typing : Not Available
Typing Status : Complete
Null allele resolution status : Not Applicable
Mismatched Locus : A, B, C, DRB1, DQB1
Matching score with Patient : 5 of 10 (High resolution two field matching)

Locus	HLA-A*	HLA-B*	HLA-C*	HLA-DRB1*	HLA-DQB1*
Allele 1	29:01:01	07:05:01	06:02:01	03:01:01	02:01:01
Allele 2	68:01:01	58:02:01	15:05:02	12:01:01	05:01:01

Test Ordering Information

Test Code	Test Name	Methodology	Specimen Type	Test Schedule & TAT
H0015e	HLA typing High Resolution	NGS with illumina NextSeq 550	2ml whole blood in EDTA tube	Sample by friday 9am, reporting on next Tuesday, 5pm

Name of Salesperson: ..... Contact: .....

support@mfine.co www.mfine.co