

**More Confidence.  
More Results.**



## **LIFECODES<sup>®</sup>**

*Compatibility Solutions for a Lifetime*

**LIFECODES<sup>®</sup>**  
Single Antigen  
Class I & Class II

**LIFECODES<sup>®</sup>**  
C3d Detection

**LIFECODES<sup>®</sup>**  
LSA<sup>™</sup>-MIC



# LIFECODES

## Single Antigen Class I & Class II

The Enhanced LSA assay demonstrates a lower false positive rate<sup>1</sup> – increasing your ability to find acceptable donors and providing new beginnings for more transplant patients. With added coverage and specificity, our test is designed for you, to improve operational efficiencies and workflow.

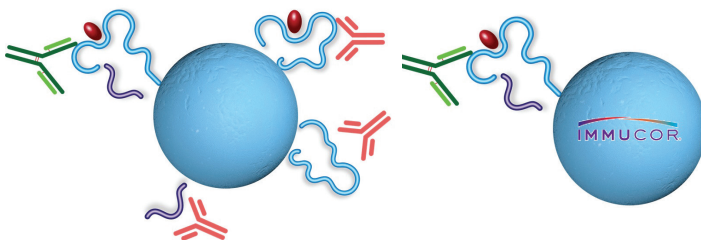
### Ensure Confidence in your Results

- **Additional Antigens**  
Class I & Class II antigen panels provide a more complete antibody profile
- **20:40 Serum to Beads ratio option**  
Higher MFI values, especially in the 1,000 - 5,000 MFI range
- **Simplified Calculation**  
Increases sensitivity & reproducibility
- Vacuum manifold wash technique reduces total hands-on time, operator variation, and contamination risk

### Streamlined Data Analysis

The MATCH IT! software suite was designed specifically as accessory to assist in the evaluation of test results from the LIFECODES Antibody products.

- Built In Epitope Tail Analysis
- Advanced highlight and overlay tools to help determine antibody specificity
- Multiple Graphing features
- Various Reporting Options and Formats
- Automatic import of data into MATCH IT!<sup>®</sup> software - allowing for clear and easy results interpretation



*“Through advances in our manufacturing processes, the current Immucor single antigen panel contains very little denatured antigen.”*

*- Bryan Ray, PhD, Immucor*

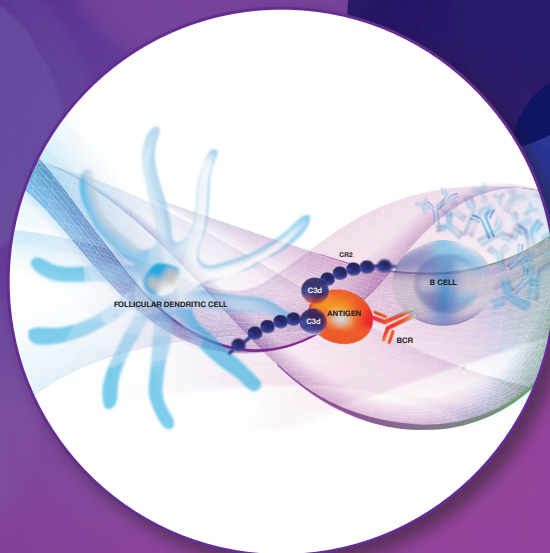
Denatured antigen is the #1 cause of false positive Single Antigen results.<sup>2</sup> It has been demonstrated that Immucor's LSA beads contain “exclusively” the clinically relevant native HLA-I antigen.<sup>1</sup> The minimal amount of denatured antigen on the single antigen beads makes the Immucor LIFECODES<sup>®</sup> Single Antigen Assay an ideal method for resolving false positives.

# LIFECODES

## C3d Detection

### Simplified Detection of Complement Binding Antibody

The LIFECODES C3d Assay provides a measure of the binding and processing of complement to one of its end products - C3d. When combined with our LIFECODES LSA™ Single Antigen Kits, the assay offers a simple method for the detection of complement binding to HLA antibodies. Assessment of C3d fixing as part of prospective HLA monitoring can potentially aid stratification of patients at the highest risk of long-term renal allograft dysfunction.<sup>3</sup>



*“New findings now show that the presence of C3d-binding donor specific anti-HLA antibodies (DSAs) at the time of AMR strongly predicts kidney allograft loss and may enable accurate risk stratification of these patients.”<sup>4</sup>*

# LIFECODES

## LSA-MIC

### Comprehensive MICA Single Antigen Panel

The LSA-MIC kit is designed to detect antibodies directed against MICA antigens. Publications have suggested that anti-MICA antibodies may play a role in the failure of renal allografts.

*“MICA antibodies are significantly and independently associated with reduced graft survival in donor graft, providing strong evidence for the involvement of these antibodies with graft rejection.”<sup>5</sup>*

- Extensive representation of MICA antigens provides almost 2x the coverage compared to other kits
- Majority of the immunogenic epitopes are present on multiple antigens
- Proprietary manufacturing processes reduce non-specific reactivity thus resulting in fewer false positive reactions

MICA*001	MICA*009	MICA*019	MICA*037
MICA*002	MICA*011	MICA*024	MICA*041
MICA*004	MICA*012	MICA*028	MICA*042
MICA*005	MICA*015	MICA*029	MICA*043
MICA*006	MICA*016	MICA*030	MICA*046
MICA*007	MICA*017	MICA*033	MICA*050
MICA*008	MICA*018	MICA*036	MICA*051

*Highlighted antigens represent unique coverage*

<sup>1</sup> Ravindranath M.H., et al. Monitoring native HLA-I trimer specific antibodies in Luminex multiplex single antigen bead assay: Evaluation of beadsets from different manufacturers, J. Immunol Methods (2017) 450:73-80.

<sup>2</sup> Sullivan et al. Understanding solid-phase HLA antibody assays and the value of MF Human Immunology 78 (2017) 471-480.

<sup>3</sup> Kim et al. Clinical risk stratification of paediatric renal transplant recipients using C1q and C3d fixing of de novo donor-specific antibodies. Pediatric Nephrology (2018).

<sup>4</sup> Sicard, A. et al. Detection of C3d binding Donor Specific Anti-HLA Ab at diagnosis of Humoral Rejection Predicts Renal Graft Loss. JASN (2014) October, Vol 26.

<sup>5</sup> Chowdhry, et al. Role of Anti-MICA Antibodies in Graft Survival of Renal Transplant Recipients of India, Journal of Immunology Research (2018)

Please contact your Immucor Sales Representative  
to schedule a LIFCODES assay demonstration.



Transfuse | Transplant | Transform a **life**

**LIFECODES® LSA Class I Assay**

**Quantity:**  
24 tests/kit

**Bead Panel:**  
96; 30 HLA-A Beads, 48 HLA-B Beads,  
18 HLA-C Beads

**Control Beads:**  
1 Positive Control Bead & 1 Negative  
Control Bead

**Catalog #:**  
265100/265100R\*

**LIFECODES® LSA Class II Assay**

**Quantity:**  
24 tests/kit

**Bead Panel:**  
96; 32 HLA-DRB1 Beads, 6 HLA-DRB345  
Beads, 31 HLA-DQA1/B1 Beads, 27 HLA-  
DPA1/B1 Beads

**Control Beads:**  
1 Positive Control Bead & 1 Negative  
Control Bead

**Catalog #:**  
265200/265200R\*

**LIFECODES® C3d Detection Assay**

**Quantity:**  
24 tests/kit

**Control Beads:**  
1 Positive Control Bead & 1 Negative  
Control Bead

**Catalog #:**  
265100/265100R\*

**LIFECODES® LSA MIC Assay**

**Quantity:**  
24 tests/kit

**Bead Panel:**  
28 MICA Beads

**Control Beads:**  
1 Positive Control Bead & 1 Negative  
Control Bead

**Catalog #:**  
265200/265200R\*