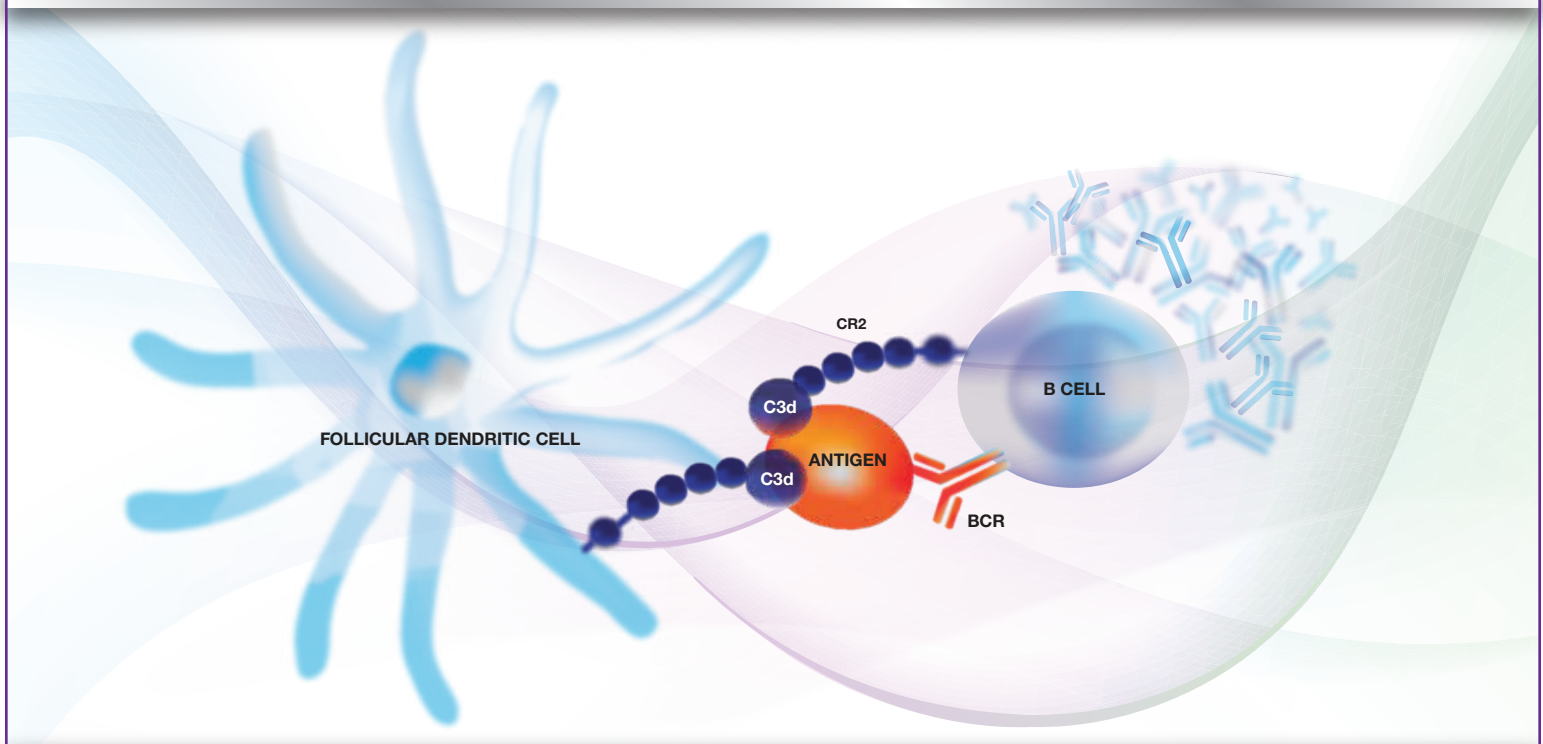




# LIFECODES C3d Assay

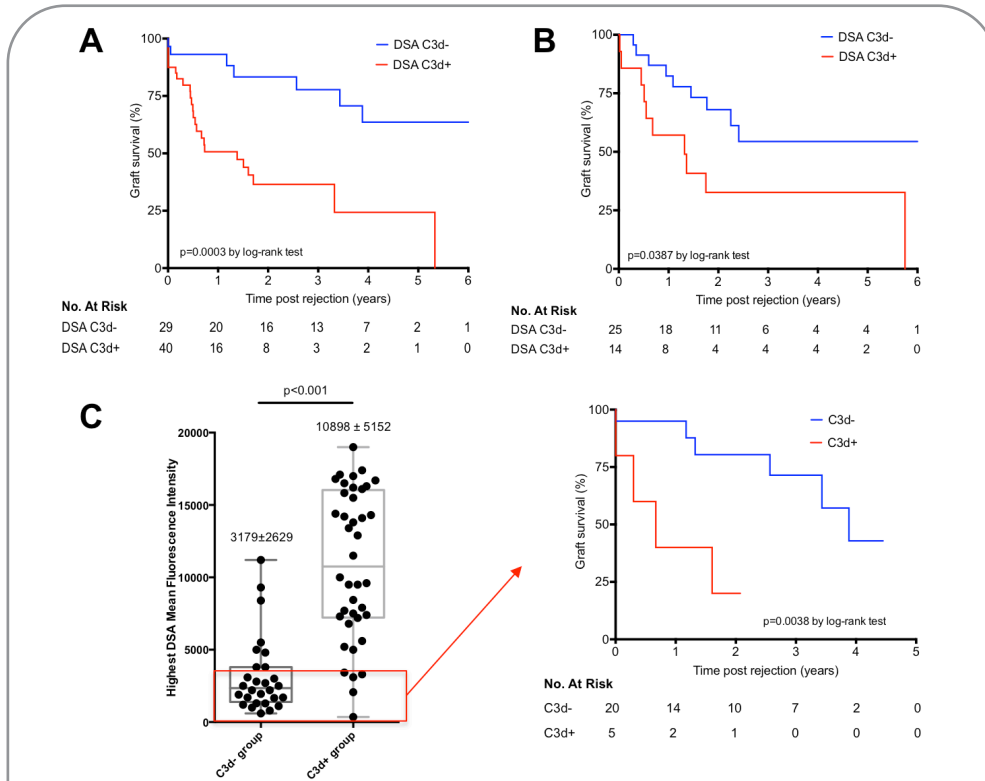
## Detection by PE Conjugated Anti-C3d



### BENEFITS & FEATURES

- Identifies complement binding antibodies
- Internal positive control bead
- Results integrated into MATCH IT!® Analysis software
- Utilizes Luminex® xMAP® technology

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.



### Prognostic significance of C3d-binding DSA at time of AMR in kidney transplantation.

(A, B) Kaplan-Meier curves for kidney graft survival after AMR according to the DSA-C3d status in the principal (A) and the validation (B) cohorts. (C, left) The MFI of the highest DSA is plotted according to patients' C3d status (left). (C, right) Kidney graft survival after AMR according to the DSA-C3d status in patients with the lowest DSA-MFI.

Sicard, A. et al. Detection of C3d-binding donor-specific anti-HLA antibodies at diagnosis of humoral rejection predicts renal graft loss. *J. Am. Soc. Nephrol.* doi:10.1681/ASN.2013101144

In addition to modulating innate immunity, complement modulates B and T cell functions. C3d, the split product of C3, has been shown to have a significant effect on B cells that are the effector cells responsible for generating the humoral response. C3d is the primary ligand for complement receptor 2 (CR2/CD21).

Murata, K., Baldwin W.M. Transplantation Reviews 23:139-150 (2009)

Measuring the activation of complement components such as C3d or C4d is a more accurate way to evaluate complement fixation than measuring cell lysis (CDC).

Almahri et al. Tissue antigens (2012) 80:404-15

Catalog Number	Description	Quantity
265400 (CE) 265400R (RUO)	LIFECODES C3d Detection Screen for complement (C3d) binding to antibody/antigen complex	24 tests

(Kit includes: Anti-human C3d PE-conjugate, Complement Sera, Positive Control Luminex Bead, Wash Buffer)

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

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