### **IL-10 Validations**

- Validation includes:
- % detectability data for Supplier B's Human CVD3 and Cytokine multiplex panels
- Reproducibility data for human Cytokine multiplex panel

# Suppliers

- A: Bio-Rad
- B: Linco (done)
- C: Upstate
- D: Biosource
- E: RnD Systems

## IL-10 - % Detectability

 Using supplier B's Cytokine multiplex panel as a 21-plex, % detectability of IL-10 in serum and plasma from healthy donors:

Citrated plasma (n=16): 87.5%

• Serum (n=20): 85%

 (Note that for each sample type a different set of donors were used.)

## IL-10 - % Detectability

 Using supplier B's Human CVD3 panel, % detectability of IL-10 in serum and plasma from healthy donors:

• EDTA plasma (n=10) 80%

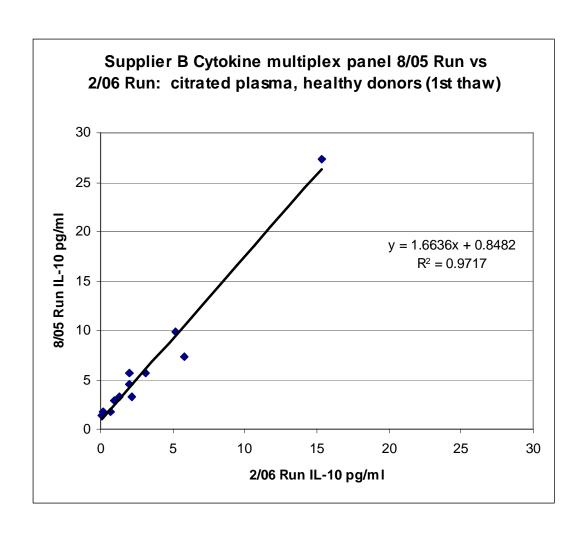
Citrated plasma (n=10)
80%

• Serum (n=10) 80%

 (Note that for each sample type a different set of donors were used.)

### Supplier B

Human Cytokine multiplex panel



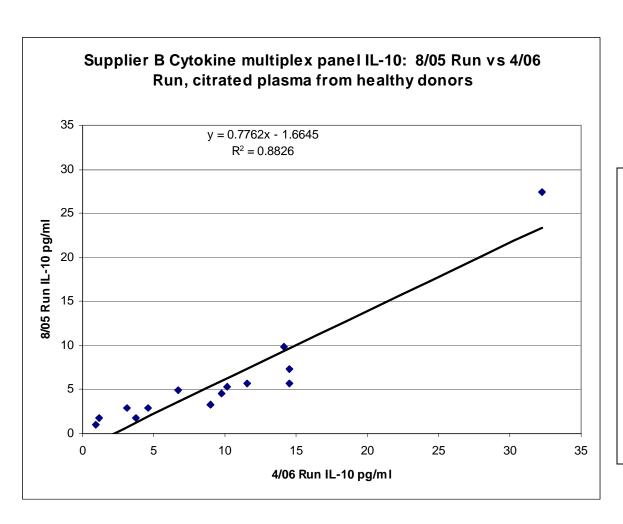
#### Reproducibility

IL-10 levels for citrated plasma samples from healthy donors assayed with Supplier B's Cytokine multiplex panel, assayed 8/05 as a 21-plex, agreed well with levels for the same sample set, assayed 2/06 as a 7-plex.

 $R^2 = 0.972$ 

### Supplier B

#### Human Cytokine multiplex panel



### Reproducibility

IL-10 levels for citrated plasma samples from healthy donors assayed with Supplier B's Cytokine multiplex panel, assayed 8/05 as a 21-plex, agreed moderately well with levels for the same sample set, assayed 4/06 as a 3-plex. Reproducibility is likely affected by levels that approach the lower limit of detectability.

$$R^2 = 0.883$$

## IL-10 summary

- The assays are detecting levels of IL-10 in healthy populations, that approach the lower limit of detectability.
- Freeze-thaw effects may exist but have not been investigated formally.
- Very high values should probably be considered spurious in healthy subjects.