The T-Cell Xtend reagent
Testing your T-SPOT samples up to 32 hours after blood draw
With the T-Cell Xtend® reagent you can test your blood samples up to 32 hours

Blood storage

- When peripheral blood mononuclear cells (PBMCs) are separated using FICOLL-PAQUE® PLUS, the majority of the red blood cells and granulocytes are pelleted on the basis of density.

- When blood is stored for longer than 8 hours, granulocytes can become activated causing a decrease in their density. As a result, the granulocytes can contaminate the enriched PBMC layer.¹

- Activated granulocytes can release pre-stored granules², which may cause oxidative stress to lymphocytes in the PBMC layer. This may reduce cell viability and, more specifically, the ability of cells to release interferon-gamma.

- The presence of granulocytes may also result in non-specific background, affecting results with stored blood.

Using the T-Cell Xtend reagent

- Use of the T-Cell Xtend reagent has been demonstrated to reduce the presence of granulocytes in the PBMC layer, thus allowing prolonged storage of blood samples for up to 32 hours before performing T-SPOT tests.

- The T-Cell Xtend reagent is a bispecific monoclonal antibody that cross-links activated granulocytes with red blood cells, creating a significantly heavier complex removed during centrifugation.

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Granulocyte contamination of the PBMC layer increases with blood storage time.

Granulocyte contamination of the PBMC layer is minimal with increased blood storage time and addition of the T-Cell Xtend reagent.
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Advantages and benefits of the T-Cell Xtend reagent

1. Equivalent accuracy to standard T-SPOT.TB test results but with added flexibility.\(^1,3,5\)

2. Samples can be collected at a distance from the testing laboratory.

3. Samples can be collected throughout the day or stored overnight.

4. Allows for more flexibility in batching samples.

5. Does not require additional equipment.

6. Allows for use of an overnight delivery service.

Using the T-Cell Xtend reagent in the laboratory

The T-Cell Xtend reagent is added to blood samples in the laboratory before commencing T-SPOT tests.

Please refer to PI-TT.610-UK-V5 for instructions or contact our Product Support Manager on info@oxfordimmunotec.com
REFERENCES


