



T-Cell *Xtend*[®]

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.

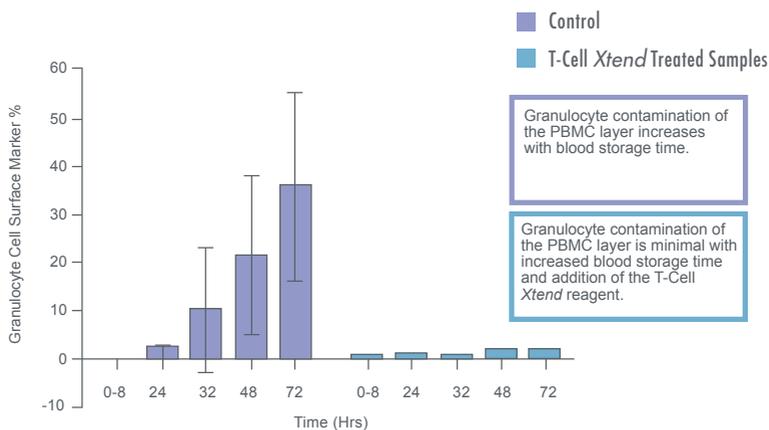


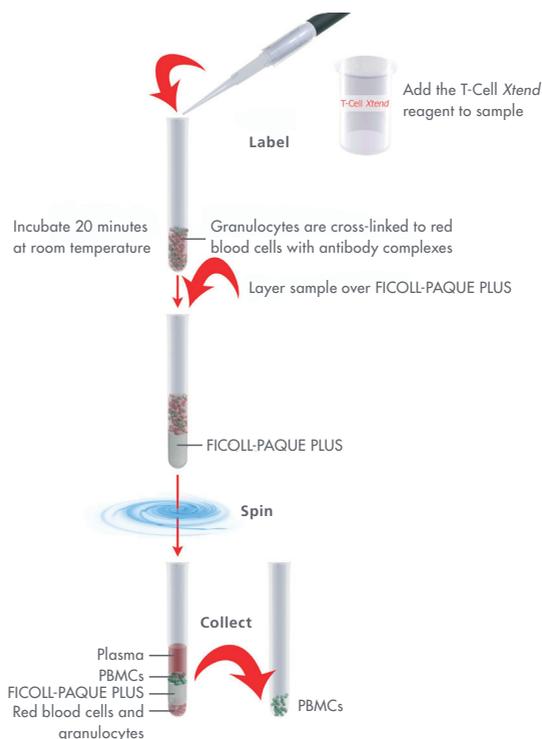
Figure 1: Day T. Summary of Data in Support of T-Cell *Xtend* European Product Registration. Oxford Immunotec Ltd, 2009:1-26. Unpublished data.

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.



REFERENCES

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4. Wang SH, Stew SS, Cyktor J, Carruthers B, Turner J, Restrepo BI. Validation of increased blood storage times with the T-SPOT.TB assay with T-Cell *Xtend* reagent in individuals with different tuberculosis risk factors. *J Clin Microbiol*. 2012; 50(7):2469-2471.
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T-SPOT®.TB

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Declaration of conformity (DC-TTK-UK[EC]-V9) – Oxford Immunotec Ltd for T-Cell *Xtend* (TTK.610/TTK.650)

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