Supplementary Fig. 1

A

IFNg (pg/ml)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Au tu</th>
<th>OVCAR5</th>
<th>624mel</th>
<th>none</th>
<th>CD3/28 Beads</th>
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</thead>
<tbody>
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<td>no antibody</td>
<td>HLA ABC Ab</td>
<td>isotype</td>
<td>no antibody</td>
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</tr>
</tbody>
</table>

B

OVCAR5 Stimulation

- None
- anti-HLA-ABC
- Isotype

624mel Stim.
- 624mel
- None

CD137

CD8

Stim.

No Stim.
Supplementary Fig. 2

A. Flow cytometry analysis of CD137 expression in TALs+OV5, TALs, and isotype controls.

B. Histogram showing the percentage of CD137+ cells in unmanipulated and enriched TILs.

C. Graph illustrating the tumor volume (mm³) over time (days post inoculation) for CD137+ and CD137- TILs, as well as unmanipulated TILs.

D. Images of non-manipulated and enriched TILs.