Electronic Supplementary Information (ESI) for

Antiferromagnetic Topological Insulator MnBi$_2$Te$_4$: Synthesis and Magnetic properties

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**Figure S1.** Experimental and reference PXRD patterns of (a) MnTe, (b) Bi$_2$Te$_3$ and (c) Product 1. (d) Product 2

**Figure S2.** HAADF-STEM image for the (0 1 0) crystallographic plane of Product 2. Inset: enlarged HAADF-STEM image superimposed with the schematic structure of the (0 1 0) crystallographic plane of MnBi$_2$Te$_4$ and Bi$_2$Te$_3$. 
Figure S3. Survey XPS spectra of (a) fresh and (b) oxidized MnBi$_2$Te$_4$ surfaces.

Figure S4. (a) EDX spectrum of oxidized MnBi$_2$Te$_4$. (b) Raman spectrum of oxidized and fresh MnBi$_2$Te$_4$.

Figure S5. Suppression of $T_N$ with increasing applied magnetic fields.