New technological developments to study neutrino oscillation are usually associated with the word “giant” or “underground”. The challenging requirements for precise measurement of antineutrino spectra very close to a reactor core have pushed detector developments in the other direction: a more compact system that operates on the surface and capable of retaining efficiency in signal detection and in background rejection. In this talk we will present the recent development of a 3D-segmented composite scintillator detector with a design that pushes the concept of a granular detector to the next level.