Validation analyses #1 and #2: The specificity of the GATA2_(SC-9008) antibody is shown by 1) the detection of a single band in G1E cells, and 2) the loss of that signal upon repression of the Gata2 gene in G1E-ER4+E2 cells.

Western blot analysis of GATA2 expression in various mouse cell lines. Whole cell extracts prepared from G1E, G1E-ER4+E2, MEL, and CH12 cells were separated by SDS-PAGE and transferred to PVDF using standard immunoblotting methods. GATA2 expression was detected using rabbit anti-GATA2 (H-116; sc-9008, 1:5000) followed by incubation with anti-rabbit secondary antibody (1:5000) and detected by ECL Plus (Amersham Biosciences). As expected, GATA2 was detected in G1E cells (a model for erythroid progenitor cells), but not G1E-ER4+E2 cells (a model for differentiating erythroblasts), consistent with published microarray data (Welch et al., 2004) showing that the Gata2 gene is expressed abundantly in progenitors but is strongly repressed during differentiation. As expected, no GATA2 is detected in MEL (erythroblast model) or CH12 cells (a B-cell lymphoma; GATA2 is not found in this lineage). Thus the specificity of this antibody is shown by the detection of a single band in G1E cells and the loss of that signal upon repression of the Gata2 gene.