A conserved mechanism of sirtuin signalling

through steroid hormone receptors

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Supplementary Figures

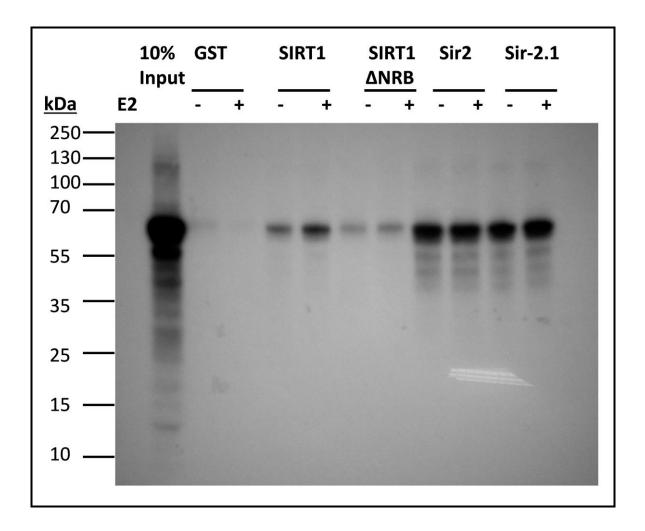


Figure S1. Assay of sirtuin interaction with ER α . Complete fluorograph of Figure 5b (upper panel). *In vitro* expressed ER α was bound to GST or GST-tagged SIRT1 (wt or NR-box mutant, Δ NRB), Sir-2.1 and Sir2 in the presence of DMSO (-) or 1 μ M E2 to detect ligand-independent and ligand-dependent interaction respectively. Bound complexes were co-resolved with "Input" ER α and subjected to fluorographic detection; positions of molecular weight markers shown.

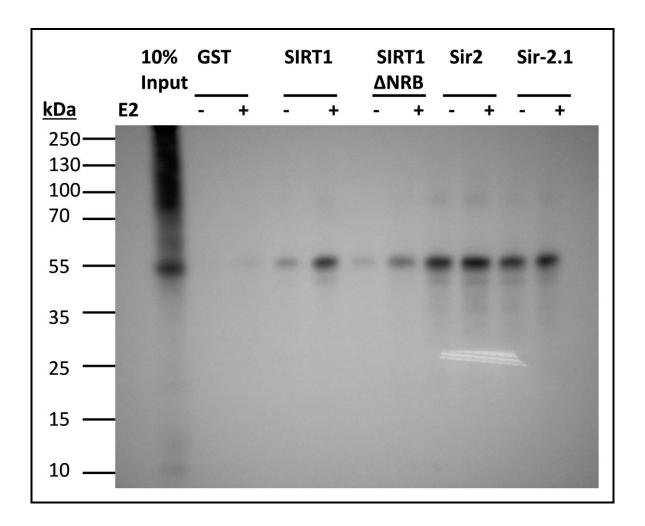


Figure S2. Interaction between sirtuins and ERβ. Full, uncropped fluorograph of **Figure 5b** (lower panel). *In vitro* expressed ERβ was bound to GST or GST-tagged SIRT1 (wt or NR-box mutant, Δ NRB), Sir-2.1 and Sir2 in the presence of DMSO (-) or 1 μM E2 to detect ligand-independent and ligand-dependent interaction respectively. Bound complexes were co-resolved with "Input" ERβ and subjected to fluorographic detection

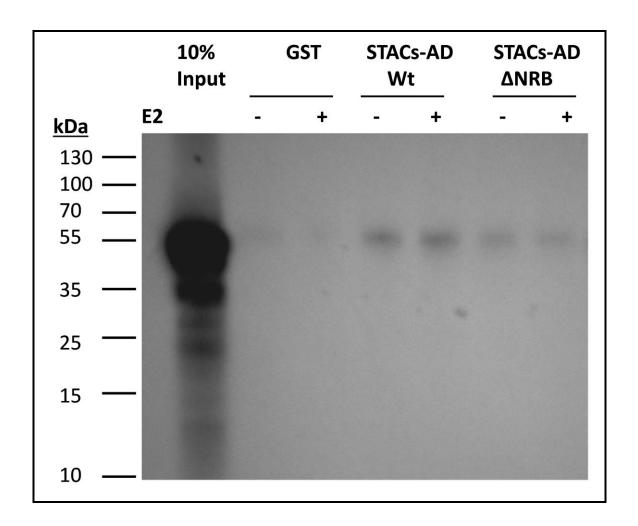


Figure S3. STACs-AD interaction with ERa. Uncropped fluorograph of **Figure 5d** (upper panel). *In vitro* expressed ERa was bound to GST or GST-tagged STACs-AD wt or its NR-box mutant (Δ NRB); DMSO (-) or 1 μ M E2 were added to determine ligand-independent or ligand-dependent interaction respectively. Complexes were co-resolved with "Input" ERa.

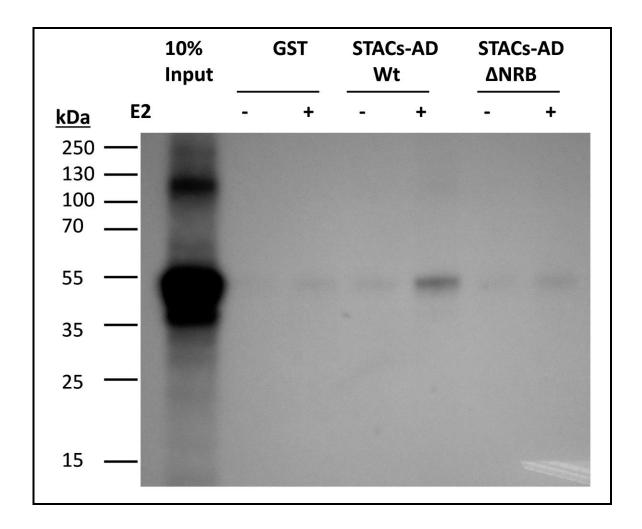


Figure S4. STACs-AD interaction with ERβ. Uncropped fluorograph of Figure 5d (lower panel). *In vitro* expressed ERβ was bound to GST or GST-tagged STACs-AD wt or its NR-box mutant (Δ NRB); DMSO (-) or 1 μ M E2 were added to determine ligand-independent or ligand-dependent interaction respectively. Complexes were co-resolved with "Input" ERβ.

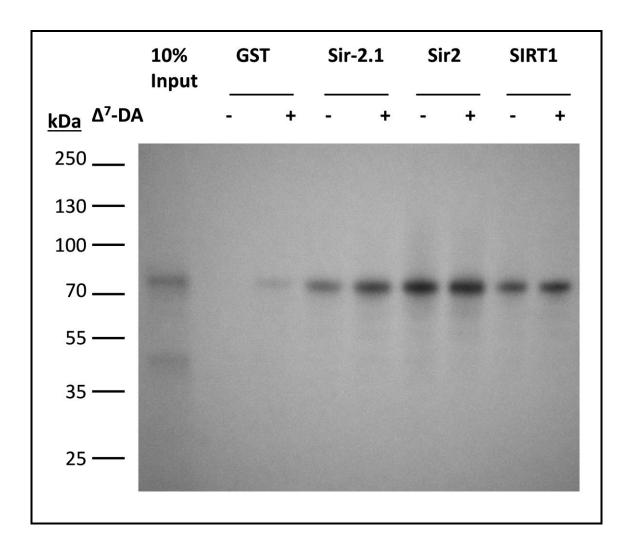


Figure S5. DAF-12 interaction with sirtuins. Fluorograph of **Figure 5e** (uncropped). *In vitro* expressed DAF-12 was bound to GST or GST-tagged Sir-2.1, Sir2 and SIRT1 (wt only) in the presence of DMSO (-) or 1 μ M Δ^7 -dafachronic acid (DA) to determine ligand-independent or ligand-dependent interaction respectively. Complexes were co-resolved with "Input" DAF-12.