

## Supplemental Material

Identification of compounds that inhibit estrogen-related receptor alpha signaling using high-throughput screening assays

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### Table of Contents

#### Tables

Table S1. Cell Line Details	2
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#### Figures

Figure S1. Chemical structure of XCT790	3
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Figure S2. Flow chart of ERR $\alpha$ antagonist determination	3
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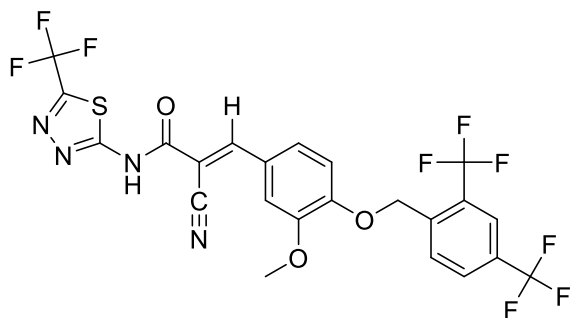
Figure S3. Concentration response curves, using 15-point dilutions, were acquired on Etoposide using ERR, PGC/ERR, and viability assays	4
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Figure S4. Concentration response curves, using 15-point dilutions, were acquired on SAHA using ERR, PGC/ERR, and viability assays	4
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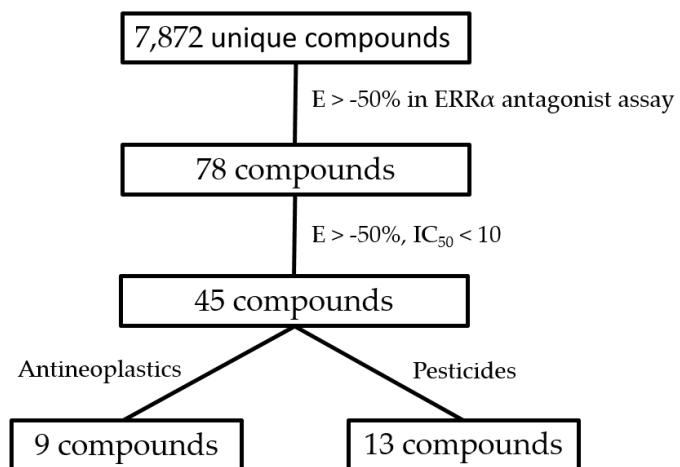
**Supplementary Table S1.** Cell Line Details

Name	Cell Line	Target	Assay Readout	Acquired
AR-HEK293	HEK293	Androgen Receptor	Fluorescence	Life Technologies
AR-MDA	MDA-MB-453	Androgen Receptor	Luminescence	ATCC
Nrf2/ARE-HepG2	HepG2	Antioxidant Response Element	Fluorescence	Life Technologies
CAR-HepG2	HepG2	Constitutive Androstane Receptor	Luminescence	Dr. Caitlin Lynch Dr. Hongbing Wang
ER-HEK293	HEK293	Estrogen Receptor $\alpha$	Fluorescence	Life Technologies
ER-MCF7	vMCF7	Estrogen Receptor $\alpha$	Luminescence	Dr. Michael S. Denison
ER $\beta$ -HEK293	HEK293	Estrogen Receptor $\beta$	Fluorescence	Life Technologies
ERR-HEK293	HEK293	Estrogen-Related Receptor $\alpha$	Luminescence	Dr. Christina T. Teng
FXR-HEK293	HEK293	Farnesoid X Receptor	Fluorescence	Life Technologies
TRE-GH3	GH3	Thyroid Hormone Receptor	Luminescence	Dr. Albertinka J. Murk
MMP-HepG2	HepG2	Mitochondrial Membrane Potential	Membrane Potential	ATCC
p53-HCT-116	HCT-116	p53	Fluorescence	Life Technologies
PGC/ERR-HEK293	HEK293	Estrogen-Related Receptor $\alpha$	Luminescence	Dr. Christina T. Teng
PPAR $\gamma$ -HEK293	HEK293H	Peroxisome Proliferator-Activated Receptor $\gamma$	Fluorescence	Life Technologies
PR-HEK293	HEK293	Progesterone Receptor	Fluorescence	Life Technologies
RAR-C3H10T1/2	C3H10T1/2	Retinoic Acid Receptor	Luminescence	Dr. Yanling Chen Dr. David H. Reese
ROR $\gamma$ -CHO	CHO	Retinoic Acid-Related Orphan Receptor $\gamma$	Luminescence	Dr. Anton M. Jetten
ShhGli1-3T3	NIH3T3	Sonic Hedgehog Pathway	Luminescence	Dr. Yanling Chen Dr. David H. Reese

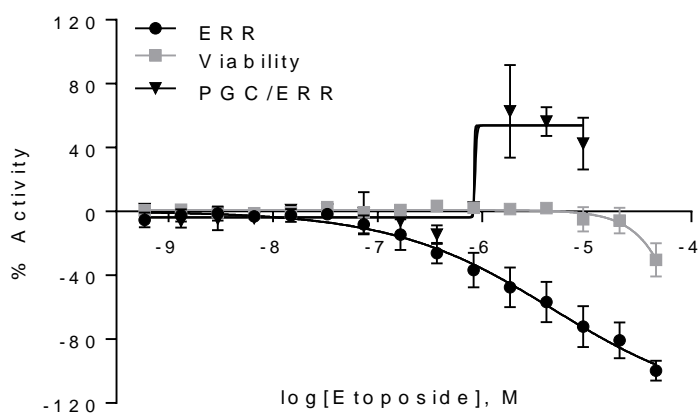
## Supplementary Figures



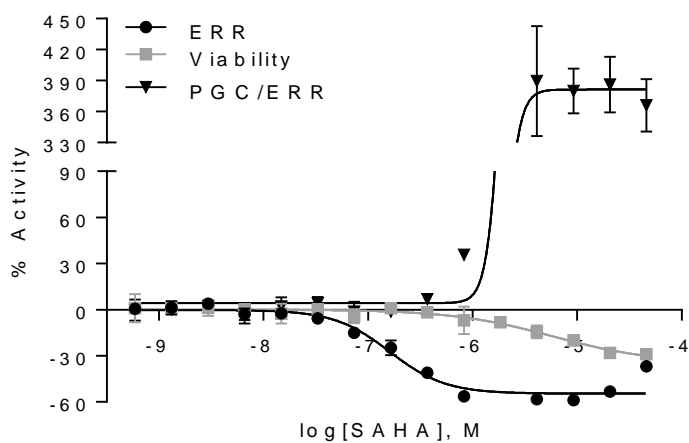
**Figure S1.** Chemical structure of XCT790.



**Figure S2.** Flow chart of ERRα antagonist determination.



**Figure S2.** Concentration response curves, using 15-point dilutions, were acquired on Etoposide using ERR, PGC/ERR, and viability assays. The positive controls for each assay were made equal to 100%, and etoposide's data was compared to these numbers. Data were collected from the primary screenings and expressed as mean  $\pm$  SD from triplicate experiments.



**Figure S3.** Concentration response curves, using 15-point dilutions, were acquired on SAHA using ERR, PGC/ERR, and viability assays. The positive controls for each assay were made equal to 100%, and SAHA's data was compared to these numbers. Data were collected from the primary screenings and expressed as mean  $\pm$  SD from triplicate experiments.