

Migration Studies and Endocrine Disrupting Activities: Chemical Safety of Cosmetic Plastic Packaging

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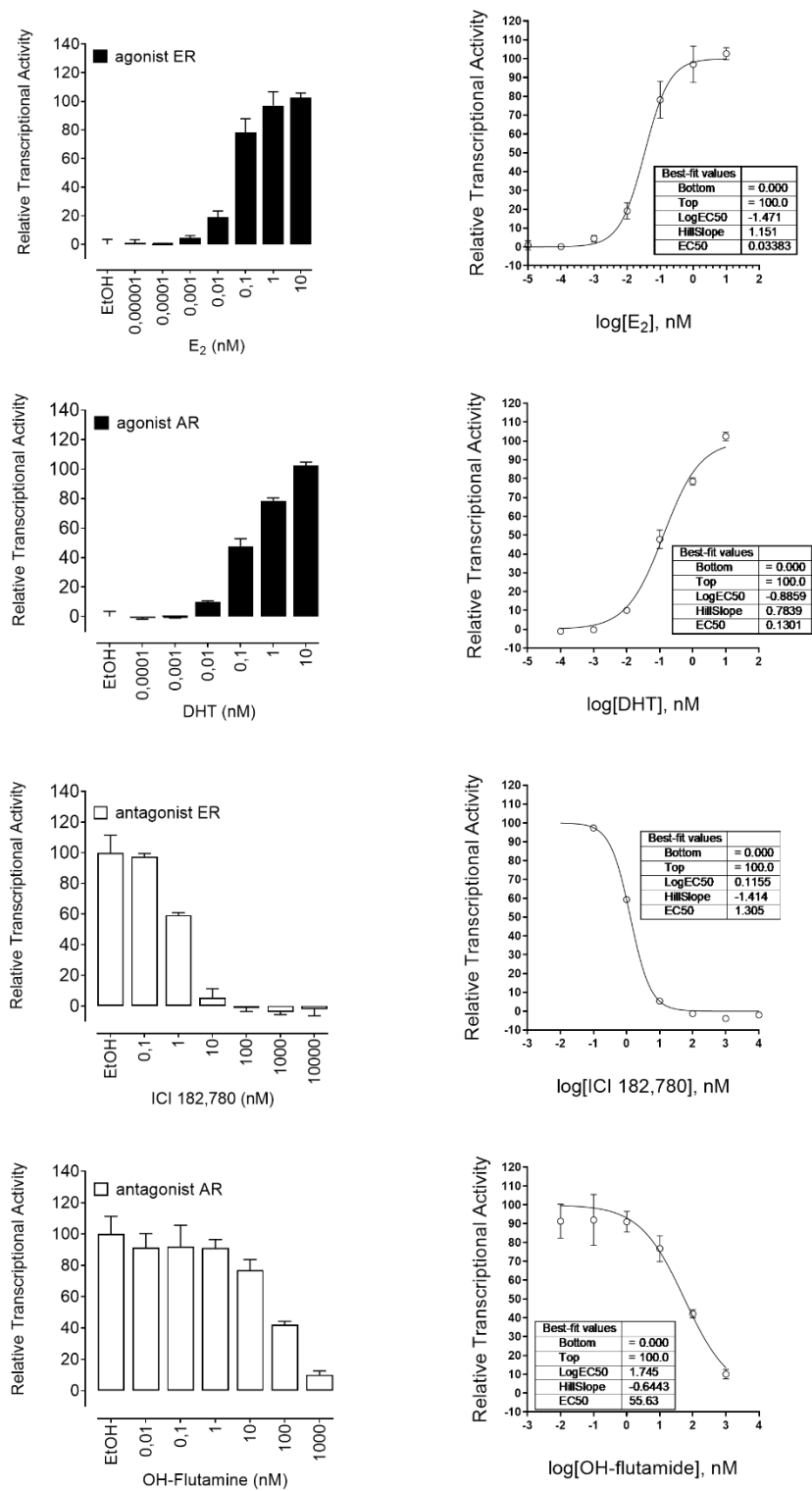


Figure S1. ER and AR agonism and antagonism with positive controls in HeLa-9903 (ER) and MDA-kb2 (AR) transcriptional activation assays. ER, estrogen receptor; AR, androgen receptor.

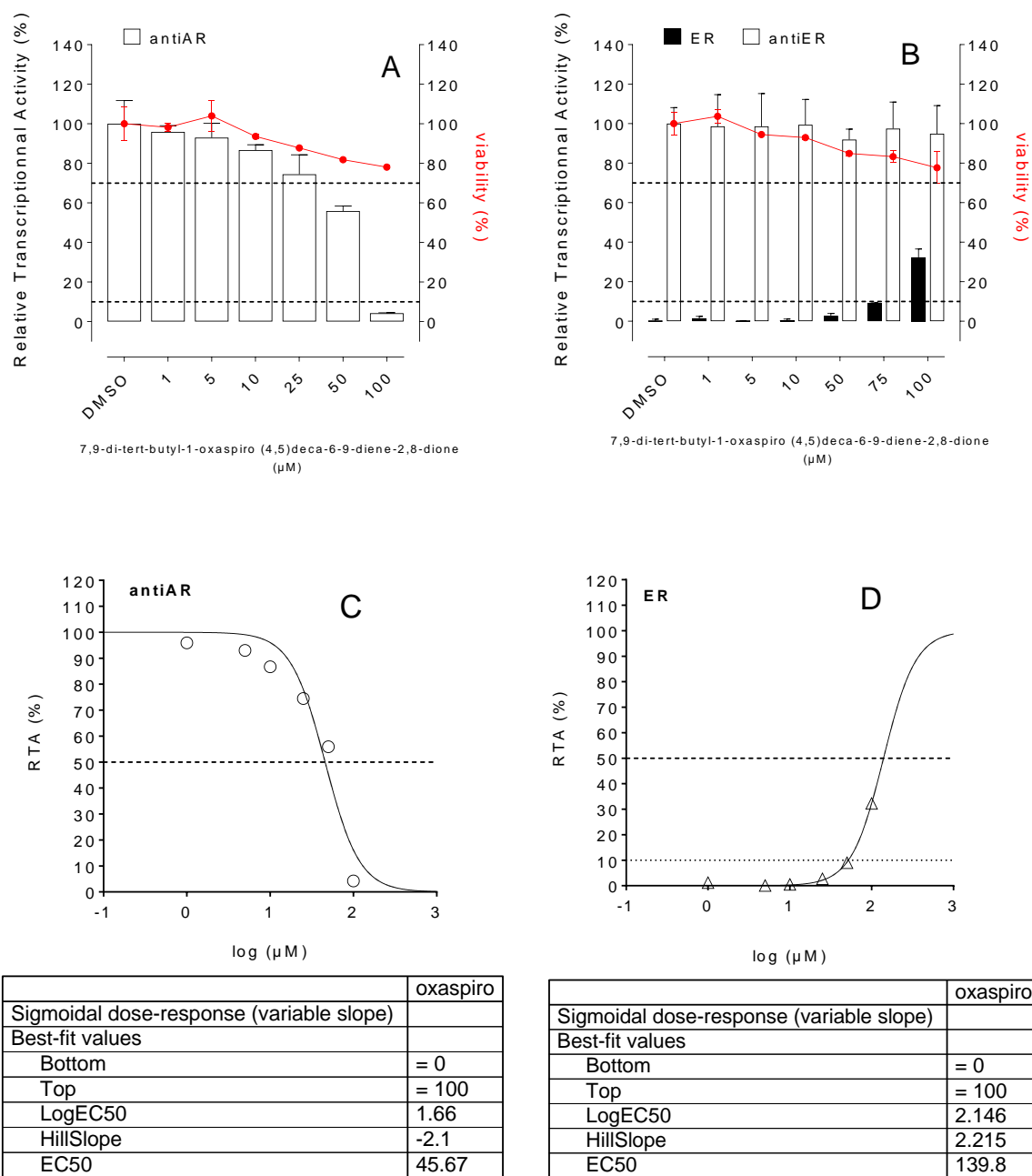


Figure S2. AR antagonism and ER agonism and antagonism with 7,9-di-tert-butyl-1-oxaspiro (4,5)deca-6-9-diene-2,6-dione in MDA-kb2 (AR) and Hela-9903 (ER) transcriptional activation assays. ER, estrogen receptor; AR, androgen receptor (A and B). Hill slope representation to calculate the IC₅₀ variable (C and D).

Table S1. Reference Chemicals: performance criteria. Values derived from the concentration response curve (log EC50, log EC10, logIC30, logIC50, Hill slope) for the reference chemicals in the ER agonist assay (A), in the ER antagonist assay (B), in the AR agonist assay (C) and in the AR antagonist assay (D).

A-Performance Criteria for Reference Chemicals in ER agonist assay

Reference Chemicals Parameter	Acceptable Range (OECD 455)	Value
<i>17β-estradiol (E2)</i>		
log E50 (M)	-11.4 to -10.1	-10.5
log E10 (M)	<-11	-11.3
Hill Slope	0.7 to 1.5	1.15
<i>17α-estradiol</i>		
log EC50 (M)	-9.6 to -8.1	-8.4
log EC10 (M)	-10.7 to -9.3	-9.2
Hill Slope	0.9 to 2	1.14
<i>17α-methyltestosterone</i>		
log EC50 (M)	-6.0 to -5.1	-4.3
log EC10 (M)	-8.0 to -6.2	-6.4
Hill Slope	-	-
<i>Corticosterone</i>		
log EC50 (M)	-	-
log EC10 (M)	-	-
Hill Slope	-	-

B-Performance Criteria for Reference Chemical in ER antagonist assay

Reference Chemical Parameter	Acceptable Range (OECD 455)	Value
ICI 182,780		
log IC50 (M)	-9.8 to -8.2	-8.9
log IC30 (M)	-10.0 to -9.0	-9.1
Flutamide		
log IC50 (M)	-	-
log IC30 (M)	-	-

C-Performance Criteria for Reference Chemical in AR agonist assay

Reference Chemical Parameter	Acceptable Range (OECD 458)	Value
5 α -Dehydrotestosterone (DHT)		
log EC50 (M)	-11.03 to -9.00	-9.88
log PC10 (M)	-12.08 to -9.87	-10.48
Hill Slope	0.57 to 4.3	1.79

D-Performance Criteria for Reference Chemical in AR antagonist assay

Reference Chemical Parameter	Acceptable Range (OECD 458)	Value
Hydroxyflutamide (OH-FLU)		
log IC50 (M)	-7.8 to -6.17	-7.25
log IC30 (M)	-8.37 to -6.41	-7.83