

ASSAYS**COST ESTIMATES*****In Vitro Assays:*****Androgen Receptor Binding (Rat Prostate)**

\$10,000

\$20,000

Aromatase (Human Recombinant)

\$10,000

\$20,000

Estrogen Receptor Binding (Rat Uterine)

\$10,000

\$20,000

Steroidogenesis (Human Cell Line)

\$10,000

\$20,000

(Until EPA has determined final endpoints, these are the best estimates for the *in vitro* assays)

In Vivo Assays:**Fish Short Term Reproduction**

\$99,000

\$110,000

\$150,000

Cost uncertainty based on:

Year of study conduct

Number of blood plasma endpoints

Analysis methods for blood plasma endpoints

Development of a solvent free delivery system for each test substance

Unique statistical analysis/software

Pre-spawning performance

Need for range-finding exposures

Need for a positive and/or negative control

Hershberger (Rat)

\$60,000

\$71,000

\$84,000

Cost uncertainty based on:

Year of study conduct

Stability of test substance

Female Pubertal (Rat)

\$115,000

\$145,000

\$190,000

Cost uncertainty based on:

Year of study conduct

Need Finalized endpoints and protocols

Stability of test substance

Male Pubertal (Rat)

\$120,000

\$155,000

\$200,000

Cost uncertainty based on:

Year of study conduct

Need Finalized endpoints and protocols

Stability of test substance

Amphibian Metamorphosis (Frog)	\$90,000	\$98,000	\$120,000
Cost uncertainty based on:			
Year of study conduct			
Development of a solvent free delivery system for each test substance			
Need for range-finding exposures			
Need for a positive and/or negative control			
Unique statistical analysis/software			
Pre-spawning performance			
Need for range-finding exposures			
Uterotrophic (Rat)	\$55,000	\$65,000	\$76,000
Cost uncertainty based on:			
Year of study conduct			
Stability of test substance			
ER Transcriptional Activation	\$10,000		\$15,000
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<i>Analytical Chemistry methods for dose confirmation (cost per assay)</i>	\$10,000	\$12,000	\$20,000
Cost uncertainty based on:			
Year of study conduct			
Need for method development			
Instrumental requirements			
Sample preparation requirements			
Stability data availability			
Solubility data availability			
Method applicability across matrices			
TOTALS	\$699,000		\$1,135,000