



## Test with Confidence: Services for EU Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

When quality and compliance are crucial to your ability to do business, you need a research organization with a demonstrated history of high performance and technical expertise. RTI International is the ideal choice for conducting your REACH-required guideline assays and testing. Our toxicologists have years of testing experience, with special expertise in developmental and reproductive toxicology. We offer a full range of in vitro and in vivo toxicology testing and can provide expert consulting services, including dossier review, data gap analysis, and study recommendations.

### Services

<b>In vivo acute toxicity tests (preferred species)</b>	<b>Guideline</b>
Acute oral toxicity—Fixed dose procedure (rat)	OECD TG 420
Acute oral toxicity—Acute toxic class method (rat)	OECD TG 423
Acute oral toxicity—Up-and-down procedure (rat)	OECD TG 425/US EPA OPPTS 870.1100
Acute dermal toxicity (rat, rabbit, guinea pig)	OECD TG 402
Acute dermal toxicity—Fixed dose procedure (rat, rabbit, guinea pig)	OECD TG 434
<b>In vivo repeated dose toxicity tests (preferred species)</b>	<b>Guideline</b>
Repeated dose 28-day oral toxicity study in rodents (rat)	OECD TG 407/US EPA OPPTS 870.3050
Repeated dose dermal toxicity: 21/28-day study (rat, rabbit, or guinea pig)	OECD TG 410 /US EPA OPPTS 870.3200
Repeated dose 90-day oral toxicity study in rodents (rat)	OECD TG 408/US EPA OPPTS 870.3100
Subchronic dermal toxicity: 90-day study (rat, rabbit, or guinea pig)	OECD TG 411/US EPA OPPTS 870.3250
Chronic toxicity studies (rat)	OECD TG 452 /US EPA OPPTS 870.4100
Combined chronic toxicity/carcinogenicity studies (rat)	OECD TG 453 /US EPA OPPTS 870.4300
Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test (rat)	OECD TG 422/US EPA OPPTS 870.3650
Neurotoxicity study in rodents (rat; oral route of administration)	OECD TG 424/US EPA OPPTS 870.6200
<b>In vivo OECD test guidelines for reproductive toxicity</b>	<b>Guideline</b>
Two-generation study (rat)	OECD TG 416 /US EPA OPPTS 870.3800
One-generation study (rat; not a standard REACH requirement)	OECD TG 415
Extended one-generation reproductive toxicity study (rat)	Draft OECD TG

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Prenatal developmental toxicity study (rat)	OECD TG 414/US EPA OPPTS 870.3700
Developmental neurotoxicity study (rat)	OECD TG 426 /US EPA OPPTS 870.6300
Reproduction/developmental toxicity screening test (rat)	OECD TG 421/US EPA OPPTS 870.3550
Rodent dominant lethal test (rat)	OECD TG 478 /US EPA OPPTS 870.5450
<b>Additional tests</b>	<b>Guideline</b>
Uterotrophic assay (adult ovariectomized or intact peripubertal rat)	OECD TG 440/US EPA OPPTS 890.1600
Hershberger bioassay (adult castrate or intact peripubertal rat)	OECD TG 441 US EPA OPPTS 890.1400
Pubertal development and thyroid function in intact juvenile/peripubertal male rats	US EPA OPPTS 890.1500
Pubertal development and thyroid function in intact juvenile/peripubertal female rats	US EPA OPPTS 890.1450
Estrogen receptor binding assay using rat uterine cytosol (ER-RUC)	US EPA OPPTS 890.1250
Estrogen receptor transcriptional activation (ER-TA) [human cell line (HeLa-9903)]	OECD TG 455/US EPA OPPTS 890.1300
Androgen receptor binding (rat prostate cytosol—RPC)	US EPA OPPTS 890.1150
Steroidogenesis (human cell line—H295R)	US EPA OPPTS 890.1550 (draft OECD TG)
Aromatase (human recombinant)	US EPA OPPTS 890.1200
Toxicokinetics	OECD TG 417/US EPA OPPTS 870.7485
In silico methods—kinetic modeling (QSAR)	Proposed draft OECD TG 417

Other protocols and study designs are available:

- National Toxicology Program (NTP) reproductive assessment by continuous breeding (RACB) assay with enhancements
- NTP modified one-generation (MOG) study in rodents
- Epididymal sperm count, motility, morphology, and vaginal cytology evaluations of samples from other studies (e.g., 90-day, chronic)
- Testicular homogenization-resistant spermatid head counts (SHC)
- Adult intact male 15-day assay (endocrine disruptor assay)

Your assays will be handled by highly trained, experienced technicians in RTI's state-of-the-art facilities. Our team's credentials and their commitment to quality and full regulatory compliance make RTI the laboratory of choice for REACH testing.

- Our study directors and researchers have been conducting GLP-compliant studies for 10–40 years using rats, mice, and rabbits. They are experienced in designing and conducting GLP-compliant studies, managing GLP study records, and writing GLP-compliant study reports.

- Our on-site quality assurance unit oversees regulatory compliance in accordance with applicable guidelines.
- RTI offers comprehensive analytical chemistry support, statistical support, and hormone analyses on site.
- RTI has an AAALAC-accredited animal facility.
- RTI uses the Instem Provantis automated data collection system.
- Our stand-alone Materials Handling Facility receives and expertly stores test compounds and formulates them in requested matrices.
- RTI's partners, Wildlife International Ltd. and EPL, Inc., provide GLP-compliant ecotoxicology and histopathology services.

### More Information

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