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Titolo	Target organ toxicology in caenorhabditis elegans // Dayong Wang
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ISBN	981-13-6010-3
Descrizione fisica	1 online resource (XIII, 337 p. 232 illus., 175 illus. in color.)
Disciplina	615
Soggetti	Target organs (Anatomy)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Protective Responses of Different Organs to Environmental Toxicants or Stresses -- Avoidance Behaviour of Nematodes to Environmental Toxicants or Stresses -- Intestinal Barrier for Nematodes against Toxicity of Environmental Toxicants or Stresses -- Epidermal Barrier for Nematodes against Toxicity of Environmental Toxicants or Stresses -- Toxicity Induction in Intestine and Epidermis in Nematodes Exposed to Environmental Toxicants or Stresses -- Toxicity Induction in Neurons and Muscle in Nematodes Exposed to Environmental Toxicants or Stresses -- Reproductive Toxicity Induction in Nematodes Exposed to Environmental Toxicants or Stresses -- Intestinal Signalling Pathways Required for the Regulation of Toxicity of Environmental Toxicants or Stresses -- Epidermal Signalling Pathways Required for the Regulation of Toxicity of Environmental Toxicants or Stresses -- Neuronal Signalling Pathways Required for the Regulation of Toxicity of Environmental Toxicants or Stresses -- Germline Signalling Pathways Required for the Regulation of Toxicity of Environmental Toxicants or Stresses.
Sommario/riassunto	This book introduces readers to intestinal and epidermal barriers, and to toxicity induction of environmental toxicants or stresses in the intestine, epidermis, neurons, muscle, and reproductive organs in <i>Caenorhabditis elegans</i> . In addition, it discusses the protective responses of various organs and nematodes' avoidance behaviour with regard to environmental toxicants or stresses. The intestinal, epidermal, neuronal, and germline signalling pathways required for the regulation of toxicity of environmental toxicants or stresses are also

introduced and discussed. As a classic model animal with well-described genetic and developmental backgrounds, the nematode *Caenorhabditis elegans* has been successfully and widely used in both toxicity assessments and toxicological studies on various environmental toxicants and stresses. Once exposure to certain environmental toxicants has occurred, the toxicants can enter into the primary targeted organs (such as intestinal cells), and even be translocated into secondary targeted organs (such as reproductive organs and neurons). Based on related available data, this book provides a systematic understanding of target organ toxicology in *C. elegans*.
