

Investigation File Example

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This page provides an example of the ISA-TAB-Nano Investigation File leveraging data from an Nanotechnology Characterization Laboratory (NCL) Investigation (*NCL200612A*). For the complete file, refer the [NCL Investigation File Example](#).

The ISA-TAB-Nano Investigation File consists of the following sections:

- ONTOLOGY SOURCE REFERENCE
- INVESTIGATION
- INVESTIGATION PUBLICATIONS
- INVESTIGATION CONTACTS
- MATERIAL
- STUDY
 - STUDY DESIGN DESCRIPTORS
 - STUDY PUBLICATIONS
 - STUDY FACTORS
 - STUDY ASSAYS
 - STUDY PROTOCOLS
 - STUDY CONTACTS

The following sections provide an example of each Investigation File section.

Ontology Source Reference

Example Investigation File Ontology Source Reference Section

A	B	C	D	E	F	G
Term Source Name	MO	NPO	UO	ChEBI	PATO	NCIt
Term Source File	http://purl.bioontology.org/ontology/MO 	http://purl.bioontology.org/ontology/npo 	http://purl.bioontology.org/ontology/UO 	http://purl.bioontology.org/ontology/CHEBI 	http://purl.bioontology.org/ontology/PATO 	http://ncit.nci.nih.gov/
Term Source Version	v.1.3.1.1	v.2011-02-12		v.80		v.11.11d
Term Source Description	MGED Ontology	NanoParticle Ontology	Unit Ontology	Chemical Entities of Biological Interest	Phenotype Ontology	NCI Thesaurus

Investigation

Example Investigation File Investigation Section

A	B
Investigation Identifier	NCL200612A
Investigation Title	Dendrimer-Based MRI Contrast Agents
Investigation Description	The goal of this investigation is to characterize a PAMAM dendrimer with an associated gadolinium chelate MRI contrast agent.
Investigation Submission Date	2002-11-30
Investigation Public Release Date	2002-11-30
Investigation Disease	
Investigation Disease Term Accession Number	
Investigation Disease Term Source REF	
Investigation Outcome	

Investigation Publications

Example Investigation Publication Section

A	B
Investigation PubMed ID	18095846
Investigation Publication DOI	10.2217/17435889.2.6.789
Investigation Publication Author List	Hall JB; Dobrovolskaia MA; Patri AK; McNeil SE
Investigation Publication Title	Characterization of nanoparticles for therapeutics
Investigation Publication Status	published
Investigation Publication Status Term Accession Number	
Investigation Publication Status Term Source REF	

Investigation Contacts

Example Investigation File Investigation Contacts Section

A	B
Investigation Person Last Name	Doe
Investigation Person First Name	John
Investigation Person Mid Initials	E
Investigation Person Email	doej@mail.nih.gov
Investigation Person Phone	1231231234
Investigation Person Fax	
Investigation Person Address	Laboratory Street, City, State 111111
Investigation Person Affiliation	Doe Laboratories
Investigation Person Roles	investigator
Investigation Person Roles Term Accession Number	
Investigation Person Roles Term Source REF	MO

Material

Example Investigation File Material Section

A	B
Material File Name	m_NCL-21.xls
Material Source Name	NCL-21

Study

Example Investigation File Study Section

A	B
Study Identifier	NCL200612A-CytotoxicityLLC-PK1
Study Title	Cytotoxicity characterization in LLC-PK1 cells
Study Description	Nanoparticle biocompatibility was evaluated in the porcine renal proximal tubule cell line, LLC-PK1. Cytotoxicity was determined as described in the NCL protocol for LLC-PK1 Kidney Cytotoxicity Assay(GTA-1). Briefly, test materials were diluted to the desired assay concentrations in cell culture media. Cells were preincubated for 24 h prior to adding test material, reaching an approximate confluence of 80%. Cells were exposed to test material for 6, 24 and 48 h, and cytotoxicity was determined using the MTT cell viability and LDH membrane integrity assays.

Study Submission Date	2002-11-30
Study Public Release Date	2002-11-30
Study Disease	
Study Disease Term Accession Number	
Study Disease Term Source REF	
Study Outcome	NCL22, NCL23 and NCL24 were found to be minimally cytotoxic, under the testing conditions utilized.
Study File Name	s_cytotoxicity-LLC-PK1.xls

Study Design Descriptors

Example Investigation File Study Design Descriptors Section

A	B
Study Design Type	comparison
Study Design Type Term Accession Number	
Study Design Type Term Source REF	

Study Publications

Example Investigation File Study Publications Section

A	B
Study PubMed ID	18095846
Study Publication DOI	10.2217/17435889.2.6.789
Study Publication Author list	Hall JB; Dobrovolskaia MA; Patri AK; McNeil SE
Study Publication Title	Characterization of nanoparticles for therapeutics
Study Publication Status	published
Study Publication Status Term Accession Number	
Study Publication Status Term Source REF	

Study Factors

Example Investigation File Study Factors Section for Study Involving Biospecimens (such as in vitro, in vivo characterization). The study factor name and type must be of nanoparticle sample if the assay is applying a nanoparticle sample to a biological system.

A	B	C	D
Study Factor Name	nanoparticle sample	dose	time of exposure

Study Protocol Components Name	MTT; acetaminophen; dimethyl sulfoxide; glycine; sodium chloride; triton-X-100; M199 cell culture media; fetal bovine serum; nanoparticle; costar 96 well flat bottom cell culture plates; plate reader; centrifuge set at 700-800 x g (Allegra X-15R, Beckman Coulter) with 96 well plate adapter; orbital plate shaker	acetaminophen; dimethyl sulfoxide; glycine; sodium chloride; triton-X-100; M199 cell culture media; fetal bovine serum; biovision LDH-cytotoxicity assay kit; nanoparticle; costar 96 well flat bottom cell culture plates; plate reader; centrifuge set at 700-800 x g (Allegra X-15R, Beckman Coulter) with 96 well plate adapter; orbital plate shaker	MTT; acetaminophen; dimethyl sulfoxide; glycine; sodium chloride; triton-X-100; M199 cell culture media; fetal bovine serum; costar 96 well flat bottom cell culture plates; plate reader; centrifuge set at 700-800 x g (Allegra X-15R, Beckman Coulter) with 96 well plate adapter; orbital plate shaker	M199 cell culture media; fetal bovine serum; costar 96 well flat bottom cell culture plates; plate reader; centrifuge set at 700-800 x g (Allegra X-15R, Beckman Coulter) with 96 well plate adapter; orbital plate shaker	acetaminophen; M199 cell culture media; fetal bovine serum	triton-X-100; M199 cell culture media; fetal bovine serum	MTT; glycine; sodium chloride	acetaminophen; glycine; sodium chloride; triton-X-100; M199 cell culture media; fetal bovine serum; nanoparticle; costar 96 well flat bottom cell culture plates; plate reader; centrifuge set at 700-800 x g (Allegra X-15R, Beckman Coulter) with 96 well plate adapter; orbital plate shaker	biovision LDH-cytotoxicity assay kit
Study Protocol Components Type	reagent; reagent; reagent; reagent; reagent; reagent; reagent; material; instrument; instrument; instrument; instrument	reagent; reagent; reagent; reagent; reagent; reagent; reagent; reagent; material; instrument; instrument; instrument; instrument	reagent; reagent; reagent; reagent; reagent; reagent; reagent; reagent; material; instrument; instrument; instrument; instrument	reagent; reagent; material; instrument; instrument; instrument; instrument	reagent; reagent; reagent; reagent	reagent; reagent; reagent; reagent	reagent; reagent; reagent; reagent	reagent; reagent; reagent; reagent; reagent; reagent; reagent; material; instrument; instrument; instrument	reagent
Study Protocol Components Type Term Accession Number	NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_1436; NPO_1436; NPO_1436	NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_1436; NPO_1436; NPO_1436	NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_1436; NPO_1436; NPO_1436	NPO_290; NPO_290; ; NPO_1436; NPO_1436; NPO_1436	NPO_290; NPO_290; NPO_290	NPO_290; NPO_290; NPO_290; NPO_290; NPO_290	NPO_290; NPO_290; NPO_290	NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_290; NPO_1436; NPO_1436	NPO_290
Study Protocol Components Type Term Source REF	NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO	NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO	NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO	NPO; NPO; ; NPO; NPO; NPO	NPO; NPO; NPO; NPO	NPO; NPO; NPO; NPO	NPO; NPO; NPO; NPO	NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO; NPO	NPO

Study Contacts

Example Investigation File Study Contacts Section

A	B
Study Person Last Name	Smith
Study Person First Name	Jane
Study Person Mid Initials	K
Study Person Email	smithj@mail.nih.gov
Study Person Phone	1231231235
Study Person Fax	
Study Person Address	Laboratory Street, City, State 111111
Study Person Affiliation	Doe Laboratories
Study Person Roles	investigator
Study Person Roles Term Accession Number	
Study Person Roles Term Source REF	MO