

Additional Information

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Sample Description Used in Examples

As described in *NCL200612A*, the objective of the Dendritic Nanotechnologies, Inc.-NCL collaboration is to characterize a PAMAM dendrimer with an associated gadolinium chelate MRI contrast agent. The nanomaterials submitted for testing at the NCL were:

- (NCL20) G4 tris (hydroxyl) terminated PAMAM dendrimer
- (NCL21) G4 pyrrolidinone terminated PAMAM dendrimer
- (NCL22) G4.5 COONa terminated PAMAM dendrimer
- (NCL23) G4.5 COONa terminated PAMAM dendrimer-Magnevist® complex
- (NCL25) G4 tris (hydroxyl) terminated PAMAM dendrimer-Magnevist® complex
- (NCL26) G4 pyrrolidinone terminated PAMAM dendrimer-Magnevist® complex

Commercially available Magnevist® (NCL24) was used as a control. The NCL example files encompass three categories: physicochemical characterization, immunotoxicology, and in-vitro toxicology.

Optional Files

Structure File

Investigating structure-activity-relationships (SAR) is important to nanotechnology modeling and simulation but the ISA-TAB specification does not support files describing the 3D composition of the experimental material. The ISA-TAB-Nano extension allows for the optional inclusion of a structure file. Structure files are referenced in the Material file.

Since there are no standard structure files for nanotechnology, investigators can include structure files of any format.

Data File

Data files are optional files that can include additional spreadsheets, images, histograms, distribution graphs, and so forth. Data files are referenced within an assay file under a column header of "image file" or "derived file."

There are no standard data file formats for nanotechnology. In gene expression studies, these files typically refer to array data files such as the Affymetrix. cel file and derived array data files. Since there are no standard data files for nanotechnology, investigators can include any data files and images associated with an assay.