

Experimental Metadata Specifications:

Imaging Assay

Importance 1: Required, 2: Required if available, 3: Optional

LINCS Field Name	Description	Importance
Imaging_Microscope_Type	Type of microscope used	1
Imaging_Detector_Type	Type of detector used	1
Imaging_Detector_Bit_Depth	Native bit depth of detector	1
Imaging_Detector_Binning	Binning setting	1
Imaging_Light_Source	Type of light source used	1
Imaging_Lens_Immersion_Type	Objective immersion type used	1
Imaging_Lens_Numerical_Aperture	Objective numerical aperture used	1
Imaging_Lens_Optical_Correction	Objective correction used	1
Imaging_Magnification	Objective magnification	1
Imaging_Pixelsize	Pixel size (in micron/pixel)	1
Imaging_Z_Dimension	numeric of Z slices	1
Imaging_Z_Stepsize	Z step size in micrometers	2
Imaging_Plate_Format	Plate format description	1
Imaging_Replication_Type	Replication type	1
Imaging_Replication_Count	numeric of replication cycles	1
Imaging_Type	Imaging experiment type (live, fixed, etc.)	1
Imaging_Fixative	Fixative used	1
Imaging_Permabilization_Agent	Permeabilization agent used	1
Imaging_Blocking_Agent	Blocking agent used	1
Imaging_Incubator	Imaging incubator used	1
Imaging_Incubator_Temp	Incubator temperature (in C)	1
Imaging_Incubator_CO2	Incubator CO2 (in percent)	2
Imaging_Incubator_O2	Incubator O2 (in percent)	2
Imaging_Incubator_Humidity	Incubator humidity (in percent)	2
Imaging_Live	Time lapse imaging experiment	1
Imaging_Total_Time	Total imaging time	1
Imaging_Time_Interval	Time point interval	1
Imaging_Total_numeric	numeric of time points	1
Imaging_Acquisition_Name	Name of acquisition round	1
Imaging_Channel_Method	Channel acquisition method (sequential or simultaneous)	1
Imaging_Channel_Name	Name of channel	2
Imaging_Method	Imaging contrast method (fluorescence, brightfield, phase, etc.)	2
Imaging_Excitation_Wavelength	Excitation wavelength (in nm)	1
Imaging_Excitation_Power	Excitation power (in percent)	2
Imaging_Excitation_Filter	Excitation filter range (tuple of values in nm)	2
Imaging_Dichroic_Filter	Dichroic mirror wavelength cutoff (in nm)	2
Imaging_Emission_Filter	Emission filter range (tuple of values in nm)	1
Imaging_Exposure_Time	Exposure time (in ms)	1
Imaging_Detector_Gain	Detector gain	1
Imaging_Marker_Intrinsic	Intrinsic marker	2
Imaging_Marker_Antibodies	Antibody marker	2
Imaging_Marker_Compounds	Chemical marker	2
Imaging_Marker_Sample_Specification	Link to marker specification in sample-level metadata	2