

CELLORGANIZER SBML OUTPUT VALIDATION AND VIRTUAL CELL COMPATIBILITY

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“all” means geometry includes cell region, nuclear region, and a collection of organelles.

“cell” means geometry includes just a cell region

“framework” means geometry includes a cell region and a nuclear region

“organelles” means geometry includes just a collection of organelles.

Cell and nuclear boundaries are defined as meshes (“parametric geometry”) or as part of an indexed image (“sampledfieldgeometry”). Organelles are defined as constructive solid geometry objects (“csGeometry”) or as part of an indexed image.

Output filename	parametricGeometry	sampledFieldGeometry	csGeometry	Valid SBML?	Virtual Cell imports?
all.xml	✓	x	✓	✓	x
all_SpatialImage.xml	x	✓	x	✓	x
all_SpatialImage_SpatialUseCompression.xml	x	✓	x	✓	x
all_SpatialImage_SpatialVCellCompatible.xml	x	✓	x	x	✓
all_SpatialImage_SpatialVCellCompatible_SpatialUseCompression.xml	x	✓	x	x	✓
all_SpatialUseCompression.xml	✓	x	✓	✓	x
cell.xml	✓	x	x	✓	x
cell_SpatialImage.xml	x	✓	x	✓	x
cell_SpatialImage_SpatialUseCompression.xml	x	✓	x	✓	x
cell_SpatialImage_SpatialVCellCompatible.xml	x	✓	x	x	✓
cell_SpatialImage_SpatialVCellCompatible_SpatialUseCompression.xml	x	✓	x	x	✓
cell_SpatialUseCompression.xml	✓	x	x	✓	x
framework.xml	✓	x	x	✓	x
framework_SpatialImage.xml	x	✓	x	✓	x
framework_SpatialImage_SpatialUseCompression.xml	x	✓	x	✓	x
framework_SpatialImage_SpatialVCellCompatible.xml	x	✓	x	x	✓
framework_SpatialImage_SpatialVCellCompatible_SpatialUseCompression.xml	x	✓	x	x	✓
framework_SpatialUseCompression.xml	✓	x	x	✓	x
organelles.xml	x	x	✓	✓	x
organelles_SpatialUseCompression.xml	x	x	✓	✓	x