Supplementary Table 1

Knowledge Graph Nodes

Assay	RNA-seq of coding RNA RNA-seq of total RNA scATAC-seq RNA-seq of coding RNA from single cells single nucleus RNA sequencing transcription profiling by array methylation profiling by array CROP-seq DNA-seq RNA-seq of non coding RNA from single cells spatial transcriptomics by high-throughput sequencing methylation profiling by high throughput sequencing microRNA profiling by high throughput sequencing ATAC-seq ChIP-seq
Organoid_source	hiPSC cell hESC cell primary cell hESC cell-hiPSC cell endothelial cell line
Organoid_type	colon brain kidney retina lung placenta thymus intestine dental follicle thyroid gland spinal cord fallopian tube gallbladder bile duct

	liver pancreas breast heart uterus stomach skin spleen yolk sac
Perturbagen	gene knockout CRISPR/Cas9 method gene overexpression Gefitinib Dibenzazepines Afimoxifene Fluorouracil Doxorubicin gene knock in Escherichia coli Salmonella enterica subsp. enterica serovar Typhimurium Mirdametinib Estrogens Progesterone XAV939 lentivirus infection Sonic Hedgehog Protein Epiregulin CSF1 CSF2 XCL1 CCL5 Interferon Gamma Tumor necrosis factor alpha (substance) EGF noggin R-Spondin-2 mutated Benzo(a)pyrene 2,2',4,4',5,5'-hexachlorobiphenyl West Nile virus CHIR 99021

	GSK-LSD1 Human astrovirus 1 Transforming Growth Factor Beta-1 GSK343 Frameshift Mutation Nicotinamide point mutated Interferon Alpha-2 Baricitinib Severe acute respiratory syndrome coronavirus 2
Protocol	Regents et al., 2019 Lancaster et al., 2013 STEMdiff™ Cerebral Organoid Kit, StemCell Technologies 08570 Nikolic et al., 2017 Turco et al., 2018 Montel-Hagen et al. 2019 Lancaster et al., 2014 Dye et al., 2016a, 2015 Hemeryck et al., 2022 Cowan et al., 2020 Kuwahara et al., 2015 (adapted) Forbester et al., 2015 Tysoe at al., 2019 Li et al., 2023 Toshiro et al., 2011 Lancaster and Knoblich., 2014 Vancamelbeke et al., 2020 Spence et al., 2011 McCracken et al., 2011 Kyungtae et al., 2021 Bauersachs et al., 2021 Cheung et al., 2021 Yu-Hwai et al. 2018 Turco et al. 2017 Childs et al., 2022 Huch et al., 2015 Fleck et al., 2021 Eastlake et al., 2019 Ptasinski et al., 2023 Turco et al 2018 Sheridan et al 2020

	Dame et al., 2018 Tsai et al., 2018 Fordham et al., 2013 Forbester et al., 2016 Howell et al., 2018 Takasato et al., 2015 Turco et al., 2017 Boretto et al., 2017 Conchola et al., 2023 Capeling et al., 2022 Childs et al., 2023 Tsai et al., 2017 Watson et al., 2014 Johnstone et al., 2019 Romitti et al., 2022 Pasca et al., 2015 Zwiggelaar et al., 2020 Xue et al., 2021 Sato et al., 2011 Davis et al., 2022 Takasato et al, 2015 Bantounas et al, 2018 Bantounas et al 2021 Vanova et al., 2023 Bartfeld et al., 2015 Villa et al., 2022 van den Berg et al., 2018 Kanber et al., 2022 Dye et al., 2015 Gonzalez-Cordero et al., 2017 Capeling et al., 2019 Linnemann et al., 2015 Stebbing et al., 2021

Supplementary Table 1. Node types and their node instances, excluding dataset nodes.