Resource Summary Report

Generated by NIF on May 6, 2025

Exemplar Microscopy Images of Tissues

RRID:SCR_021052
Type: Tool

Proper Citation

Exemplar Microscopy Images of Tissues (RRID:SCR_021052)

Resource Information

URL: https://www.synapse.org/#!Synapse:syn22345748/wiki/605339

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Description: Reference dataset of multiplexed immunofluorescence microscopy images collected at HMS Laboratory of Systems Pharmacology. Includes set of images of different types for development and benchmarking of computational methods for image processing. As of 4/2/2021, EMIT comprises tissue microarray containing cores from 34 cancer, non-neoplastic diseases, and normal tissue collected from clinical discards under IRB supervised protocol. TMA was imaged using cyclic immunofluorescence method. Additional extensions of EMIT are currently in the planning stages. Long term goal is to compose ImageNet like resource for highly multiplexed images of tissues and tumors by consolidating high quality curated datasets.

Abbreviations: EMIT

Synonyms: Exemplar Microscopy Images of Tissues (and Tumors)

Resource Type: data set, image collection, experimental protocol, 2d spatial image, image repository, immuno detection protocol, image, data repository, narrative resource, storage service resource, service resource, data or information resource, immunofluorescence

Defining Citation: DOI:10.1101/2021.03.15.435473

Keywords: Reference dataset, multiplexed immunofluorescence microscopy images, tissue microarray, cyclic immunofluorescence, tissues images, tumors images

Related Condition: glioblastoma, lung adenocarcinoma, prostate adenocarcinoma, seminoma, meningioma, mesothelioma, GI stromal tumor, liver cirrhosis, leiomyosarcoma, high-grade serous ovarian cancer, diverticulitis, acute appendicitis, metastatic melanoma,

dedifferentiated liposarcoma

Funding: NIH U54 CA225088;
NCI U2C CA233262;
NCI U2C CA233280;
Ludwig Center at Harvard Medical School and the Ludwig Cancer Research Foundation

Availability: Restricted

Resource Name: Exemplar Microscopy Images of Tissues

Resource ID: SCR_021052

Record Creation Time: 20220129T080353+0000

Record Last Update: 20250506T061747+0000

Ratings and Alerts

No rating or validation information has been found for Exemplar Microscopy Images of Tissues.

No alerts have been found for Exemplar Microscopy Images of Tissues.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Yapp C, et al. (2022) UnMICST: Deep learning with real augmentation for robust segmentation of highly multiplexed images of human tissues. Communications biology, 5(1), 1263.

Schwartzentruber J, et al. (2021) Genome-wide meta-analysis, fine-mapping and integrative prioritization implicate new Alzheimer's disease risk genes. Nature genetics, 53(3), 392.

Xiong Z, et al. (2021) Crowdsourced identification of multi-target kinase inhibitors for RET- and TAU- based disease: The Multi-Targeting Drug DREAM Challenge. PLoS computational biology, 17(9), e1009302.