

How to retrieve the alterations_across_samples.tsv file for your analysis

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Query Quick Search Beta! Download

Please cite: Cerami et al., 2012 & Gao et al., 2013

Select Studies for Visualization & Analysis:

1 study selected (1739 samples) Deselect all

Search...

PanCancer Studies	3
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Adrenal Gland	3
Ampulla of Vater	1
Biliary Tract	9
Bladder/Urinary Tract	15
Bone	2
Bowel	10
Breast	16
CNS/Brain	19
Cervix	2
Esophagus/Stomach	14
Eye	3
Head and Neck	13
Kidney	17
Liver	8
Lung	21
Lymphoid	20

Quick select: TCGA PanCancer Atlas Studies Curated set of non-redundant studies

PanCancer Studies

- MSK-IMPACT Clinical Sequencing Cohort (MSKCC, Nat Med 2017) 10945 samples
- Pan-Lung Cancer (TCGA, Nat Genet 2016) 1144 samples
- Pediatric Pan-cancer (Columbia U, Genome Med 2016) 103 samples

Cell lines

- Cancer Cell Line Encyclopedia (Broad, 2019) 1739 samples
- Cancer Cell Line Encyclopedia (Novartis/Broad, Nature 2012) 1020 samples
- NCI-60 Cell Lines (NCI, Cancer Res 2012) 67 samples

1. Select data set:
Cancer Cell Line Encyclopedia
(Broad, 2019)

Adrenal Gland

Adrenocortical Carcinoma

- Adenoid Cystic Carcinoma Project (2019) 1049 samples
- Adrenocortical Carcinoma (TCGA, Firehose Legacy) 92 samples
- Adrenocortical Carcinoma (TCGA, PanCancer Atlas) 92 samples

Ampulla of Vater

Ampullary Carcinoma

- Ampullary Carcinoma (Baylor College of Medicine, Cell Reports 2016) 160 samples

Biliary Tract

Cholangiocarcinoma

- Cholangiocarcinoma (MSK, Clin Cancer Res 2018) 195 samples
- Cholangiocarcinoma (National Cancer Centre of Singapore, Nat Genet 2013) 15 samples
- Cholangiocarcinoma (National University of Singapore, Nat Genet 2012) 8 samples
- Cholangiocarcinoma (TCGA, Firehose Legacy) 51 samples
- Cholangiocarcinoma (TCGA, PanCancer Atlas) 36 samples

2. Click "Query By Gene"

Query By Gene

Explore Selected Studies

What's New

@cbioportal



It's a small addition, but the new pencil icon allows you to quickly edit and update genes and query criteria (via OQL), in your cBioPortal queries.



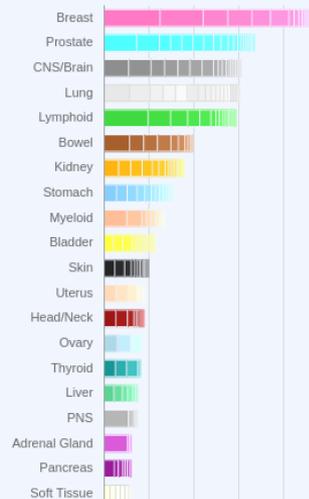
Sign up for low-volume email news alerts

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Cancer Studies

The portal contains 280 cancer studies (details)

Cases by Top 20 Primary Sites



Selected Studies: [Modify](#)

Cancer Cell Line Encyclopedia (Broad, 2019) (1739 total samples)

Select Genomic Profiles:

- Mutations 
- Copy Number Alterations 
- mRNA Expression z-Scores (RNA Seq RPKM) 

Enter a z-score threshold ±

3. Select alteration types which should be included in your analysis

Select Patient/Case Set:

[To build your own case set,](#)
[try out our enhanced Study View.](#)

All samples (1739)



4. Select Case Set

Enter Genes:

User-defined List



BRAF
MAP2
PTEN

Hint: [Learn Onco Query Language \(OQL\)](#)
to write more powerful queries [↗](#)

5. Enter your genes of interest

All gene symbols are valid.

Submit Query

6. Click "Submit Query"

Modify Query



Cancer Cell Line Encyclopedia (Broad, 2019)

All samples (1739 patients/samples) - BRAF, MAP2 & PTEN

Queried genes are altered in 656 (38%) of queried patients/samples



OncoPrint Cancer Types Summary Mutual Exclusivity Plots Mutations Co-expression Comparison CN Segments Pathways **Download**

Add Clinical Tracks 41 Add Heatmap Tracks 4 Sort Mutations View Download 26 %



Genetic Alteration
Inframe Mutation (putative driver) Inframe Mutation (unknown significance) Missense Mutation (putative driver) Missense Mutation (unknown significance) Truncating Mutation (putative driver)
Truncating Mutation (unknown significance) Amplification Deep Deletion mRNA High No alterations Not profiled

Profiled in Copy Number Alterations
Yes No

Profiled in Mutations
Yes No

Profiled in mRNA Expression z-Scores (RNA Seq RPKM)
Yes No

Modify Query



Cancer Cell Line Encyclopedia (Broad, 2019)

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- OncoPrint
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- Download**

Downloadable Data Files

Copy-number Alterations (OQL is not in effect)	Tab Delimited Format Transposed Matrix
Mutations (OQL is not in effect)	Tab Delimited Format Transposed Matrix
mRNA Expression z-Scores (RNA Seq RPKM)	Tab Delimited Format Transposed Matrix
Altered samples: List of samples with alterations	Copy Download Query Virtual Study
Unaltered samples: List of samples without any alteration	Copy Download Query Virtual Study
Sample matrix: List of all samples where 1=altered and 0=unaltered	Copy Download
mRNA expression (RNA-Seq RPKM)	Tab Delimited Format Transposed Matrix
Treatment response: IC50	Tab Delimited Format Transposed Matrix
Treatment response: Z-score of IC50	Tab Delimited Format Transposed Matrix
Treatment response: AUC	Tab Delimited Format Transposed Matrix

Gene Alteration Frequency

Gene Symbol	Num Samples Altered	Percent Samples Altered
PTEN	335	20.1%
BRAF	308	18.5%
MAP2	188	11.3%

Showing 1-3 of 3

7. Download .tsv file



Type of Genetic Alterations Across All Samples

Study ID	Sample ID	Patient ID	Altered	BRAF	MAP2	PTEN
ccl_broad_2019	NCIH1694_LUNG	NCIH1694_LUNG	1	HIGH	AMP, HIGH	no alteration
ccl_broad_2019	P3HR1_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	P3HR1_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	1	no alteration	no alteration	HIGH, Q17*
ccl_broad_2019	HUT78_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	HUT78_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	1	no alteration	no alteration	HOMDEL
ccl_broad_2019	UMUC3_URINARY_TRACT	UMUC3_URINARY_TRACT	1	no alteration	no alteration	HOMDEL
ccl_broad_2019	HOS_BONE	HOS_BONE	1	HOMDEL	no alteration	no alteration
ccl_broad_2019	H1NS1_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	H1NS1_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	1	HOMDEL	no alteration	no alteration