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Disease Association	Collecta Product(s)	Publication
Acute Lymphoblastic Leukemia	Custom shRNA Library & shRNA Constructs	 Aird D, Teng T, Huang C, Pazolli E, Banka D, Cheung-Ong K, Eifert C, Furman C, Wu Z, Seiler M, Buonamici S, Fekkes P, Karr C, Palacino J, Park E, Smith P, Yu L, Mizui Y, Warmuth M, Chicas A, Corson L, Zhu P. (2019) Sensitivity to splicing modulation of BCL2 family genes defines cancer therapeutic strategies for splicing modulators. <i>Nat Commun.</i> 10(1). doi:10.1038/s41467-018-08150-5.
Acute Myeloid Leukemia	Custom CRISPR Human Lentiviral sgRNA Library	 Cuellar TL, Herzner AM, Zhang X, Goyal Y, Watanabe C, Friedman BA, Janakiraman V, Durinck S, Stinson J, Arnott D, Cheung TK, Chaudhuri S, Modrusan Z, Doerr JM, Classon M, Haley B. (2017) Silencing of retrotransposons by SETDB1 inhibits the interferon response in acute myeloid leukemia. <i>Journal of Cell Biology.</i> Nov 6;216(11):3535-3549.
Acute Myeloid Leukemia	Custom Lentiviral Tet-Inducible shRNA Library	 Carey A, Edwards DK, Eide CA, Newell L, Traer E, Medeiros BC, Pollyea DA, Deininger MW, Collins RH, Tyner JW. (2017) Identification of Interleukin-1 by Functional Screening as a Key Mediator of Cellular Expansion and Disease Progression in Acute Myeloid Leukemia. <i>Cell Reports.</i> Mar 28;18(13):3204-18.
Acute Myeloid Leukemia	Custom Lentiviral Tet-Inducible shRNA Library	 Chan SM, Thomas D, Corces-Zimmerman MR, Xavy S, Rastogi S, Hong WJ, Zhao F, Medeiros BC, Tyvoll DA, Majeti R. (2015) Isocitrate dehydrogenase 1 and 2 mutations induce BCL-2 dependence in acute myeloid leukemia. <i>Nat. Med.</i> 21(2):178-84. PMID: 25599133
Breast Cancer	Custom shRNA Libraries from Project DRIVE & Lentiviral Packaging Mix	 Witwicki R, Ekram M, Qiu X, Janiszewska M, Shu S, Kwon M, Trinh A, Frias E, Ramadan N, Hoffman G, Yu K, Xie Y, McAllister G, McDonald R, Golji J, Schlabach M, deWeck A, Keen N, Chan H, Ruddy D, Rejtar T, Sovath S, Silver S, Sellers W, Jagani Z, Hogarty M, Roberts C, Brown M, Stegmaier K, Long H, Shivdasani R, Pellman D, Polyak K. (2018) TRPS1 Is a Lineage-Specific Transcriptional Dependency in Breast Cancer. <i>Cell Rep.</i> 25(5):1255-1267.e5. doi:10.1016/j.celrep.2018.10.023.
Breast Cancer	Custom shRNA Library & NGS Service	 Tang YC, Ho SC, Tan E, Ng AWT, McPherson JR, Goh GYL, Teh BT, Bard F, Rozen SG. (2018) Functional genomics identifies specific vulnerabilities in PTEN-deficient breast cancer. <i>Breast Cancer Research.</i> Mar 22;20(1):22. doi: 10.1186/s13058-018-0949-3.
Breast Cancer	DECIPHER™ shRNA Library: Human Module 1	 Yaglom JA, Wang Y, Li A, Li Z, Monti S, Alexandrov I, Lu X, Sherman MY. (2018) Cancer cell responses to Hsp70 inhibitor JG-98: Comparison with Hsp90 inhibitors and finding synergistic drug combinations. <i>Scientific Reports.</i> Feb 14;8:3010. doi:10.1038/s41598-017-14900-0.
Burkitt's Lymphoma	DECIPHER™ shRNA Libraries: Human Modules 1, 2, 3	 Slabicki M, Lee KS, Jethwa A, Sellner L, Sacco F, Walther T, Hüllein J, Dietrich S, Wu B, Lipka DB, Oakes CC, Mamidi S, Pyrzy ska B, Winiarska M, Ole M, Seifert M, Plass C, Kirschfink M, Boettcher M, Go b J, Huber W, Fröhling S, Zenz T. (2016) Dissection of CD20 regulation in lymphoma using RNAi. <i>Leukemia.</i> PMID: 27560109
Chronic Myeloid Leukemia	DECIPHER™ shRNA Library: Human Module 1	 Khorashad JS, Eiring AM, Mason CC, Gantz KC, Bowler AD, Redwine HM, Yu F, Kraft IL, Pomicter AD, Reynolds KR, Iovino AJ, Zabriskie MS, Heaton WL, Tantravahi SK, Kauffman M, Schacham S, Chenchik A, Bonneau K, Ullman KS, O'Hare T, Deininger MW. (2015) shRNA library screening identifies nucleocytoplasmic transport as a mediator of BCR-ABL1 kinase-independent resistance. <i>Blood.</i> Mar 12;125(11):1772-81. doi: 10.1182/blood-2014-08-588855. Epub 2015 Jan 8. PubMed PMID: 25573989; PubMed Central PMCID: PMC4357584.
Chronic Myeloid Leukemia	Custom Human Lentiviral shRNA Library	 Khorashad JS, Mason CC, Kraft IL, Reynolds KR, Pomicter AD, Eiring AM, Zabriskie MS, Iovino AJ, Heaton W, Tantravahi SK, Kauffman M, Schacham S, Chenchik A, Bonneau K, O'Hare T, Deininger MW. (2013) An Unbiased shRNA Library Screen Identifies Nucleocytoplasmic Transport As a Potential Target For Treatment Of Chronic Myeloid Leukemia. <i>Blood.</i> 122(21):2707.
Colorectal Cancer	Custom CRISPR Mouse Genome-Wide sgRNA Library	 Callow MG, Watanabe C, Wickliffe KE, Bainer R, Kummerfield S, Weng J, Cuellar T, Janakiraman V, Chen H, Chih B, Liang Y, Haley B, Newton K, Costa MR. (2018) CRISPR whole-genome screening identifies new necroptosis regulators and RIPK1 alternative splicing. <i>Cell Death & Disease.</i> Feb 15;9(3):261. doi: 10.1038/s41419-018-0301-y.
General Cancer (Technology)	Custom Human shRNA Clonal Barcode Library	 Nolan-Stevaux O, Tedesco D, Ragan S, Makhanov M, Chenchik A, Ruefli-Brasse A, Quon K, Kassner PD. (2013) Measurement of Cancer Cell Growth Heterogeneity through Lentiviral Barcoding Identifies Clonal Dominance as a Characteristic of In Vivo Tumor Engraftment. <i>PLoS One.</i> Jun 26;8(6):e67316.
Glioblastoma	DECIPHER™ shRNA Libraries	 Kulkarni S, Goel-Bhattacharya S, Sengupta S, Cochran BH. (2018) A Large-Scale RNAi Screen Identifies SGK1 as a Key Survival Kinase for GBM Stem Cells. <i>Molecular Cancer Research.</i> Jan;16(1):103-114. doi: 10.1158/1541-7786.MCR-17-0146.
Lung Cancer	Custom Human Genome-Wide Lentiviral CRISPR sgRNA Library	 Wang H, Lu B, Castillo J, Zhang Y, Yang Z, McAllister G, Lindeman A, Reece-Hoyes J, Tallarico J, Russ C, Hoffman G, Xu W, Schirle M, Cong F. (2016) Tankyrase inhibitor sensitizes lung cancer cells to EGFR inhibition via stabilizing angiogenin and inhibiting YAP signaling. <i>J Biol Chem.</i> Jul 15;291(29):15256-66. doi: 10.1074/jbc.M116.722967.
Metastatic Melanoma	Custom shRNA Library, CloneTracker™ 13K Barcode Library & Custom shRNA Constructs	 Bossi D, Cicalese A, Dellino GI, Luzi L, Riva L, D'Alesio C, Diaferia GR, Carugo A, Cavallaro E, Piccioni R, Barberis M, Mazzarol G, Testori A, Punzi S, Pallavicini I, Tosti G, Giacó L, Melloni G, Heffernan TP, Natoli G, Draetta GF, Minucci S, Pellici P, Lanfrancone L. (2016) In Vivo Genetic Screens of Patient-Derived Tumors Revealed Unexpected Frailty of the Transformed Phenotype. <i>Cancer Discov</i> 6(6):650-63. PMID: 27179036

Disease Association	Collecta Product(s)	Publication
Multiple Cancers	Custom CRISPR sgRNA Tiling Library	 Michel B, D'Avino A, Cassel S, Mashtalir N, McKenzie Z, McBride M, Valencia A, Zhou Q, Bocker M, Soares L, Pan J, Remillard D, Lareau C, Zullow H, Fortoul N, Gray N, Bradner J, Chan H, Kadoch C. (2018) A non-canonical SWI/SNF complex is a synthetic lethal target in cancers driven by BAF complex perturbation. <i>Nat Cell Biol.</i> 20(12):1410-1420. doi:10.1038/s41556-018-0221-1.
Multiple Cancers	Custom CRISPR Human sgRNA Library, sgRNA Controls, & 118 Cell Lines Screened	 Thomenius MJ, Totman J, Harvey D, Mitchell LH, Riera TV, Cosmopoulos K, et al. (2018) Small molecule inhibitors and CRISPR/Cas9 mutagenesis demonstrate that SMYD2 and SMYD3 activity are dispensable for autonomous cancer cell proliferation. <i>PLoS ONE</i> 13(6): e0197372. https://doi.org/10.1371/journal.pone.0197372
Multiple Cancers	Custom Mouse shRNA Library targeting lncRNAs	 Beermann J, Kirste D, Iwanov K, Lu D, Kleemiß F, Kumarswamy R, Schimmel K, Bär C, Thum T. (2018) A large shRNA library approach identifies lncRNA Ntep as an essential regulator of cell proliferation. <i>Cell Death and Differentiation.</i> Feb;25(2), 307-318.
Multiple Cancers	6 Custom Human Lentiviral shRNA Libraries & 398 Cell Lines	 McDonald ER 3rd et al. (2017) Project DRIVE: A Compendium of Cancer Dependencies and Synthetic Lethal Relationships Uncovered by Large-Scale, Deep RNAi Screening. <i>Cell.</i> Jul 27;170(3):577-592.e10. doi: 10.1016/j.cell.2017.07.005.
Multiple Cancers	DECIPHER™ shRNA Library: Human Modules 1, 3 & NGS Service	 Sinha S, Thomas D, Chan S, Gao Y, Brunen D, Torabi D, Reinisch A, Hernandez D, Chan A, Rankin EB, Bernards R, Majeti R, Dill DL. (2017) Systematic discovery of mutation-specific synthetic lethals by mining pan-cancer human primary tumor data. <i>Nature Communications.</i> 8, 15580. doi: 10.1038/ncomms15580.
Multiple Cancers	Custom Human Genome-Wide Lentiviral CRISPR sgRNA Library	 Estoppey D, Hewett JW, Guy CT, Harrington E, Thomas JR, Schirle M, Cuttat R, Waldt A, Gerrits B, Yang Z, Schuierer S, Pan X, Xie K, Carbone W, Knehr J, Lindeman A, Russ C, Frias E, Hoffman GR, Varadarajan M, Ramadan N, Reece-Hoyes JS, Wang Q, Chen X, McAllister G, Roma G, Bouwmeester T, Hoepfner D. (2017) Identification of a novel NAMPT inhibitor by CRISPR/Cas9 chemogenomic profiling in mammalian cells. <i>Sci Rep.</i> 2017 Feb 16; 7:42728
Multiple Cancers	Custom Human Genome-Wide Lentiviral CRISPR sgRNA Library & Custom Lentiviral shRNA Libraries	 Dejesus R, Moretti F, McAllister G, Wang Z, Bergman P, Liu S, Frias E, Alford J, Reece-Hoyes JS, Lindeman A, Kelliher J, Russ C, Knehr J, Carbone W, Beibel M, Roma G, Ng A, Tallarico JA, Porter JA, Xavier RJ, Mikanin C, Murphy LO, Hoffman GR, Nyfeler B. (2016) Functional CRISPR screening identifies the ufm1ylation pathway as a regulator of SQSTM1/p62. <i>Elife.</i> Jun 28;5. pii: e17290. doi: 10.7554/eLife.17290. PubMed PMID: 27351204
Pancreatic Cancer	Custom shRNA Library & Custom Barcode Library	 Yao W, Rose J, Wang W, Seth S, Jiang H, Taguchi A, Liu J, Yan L, Kapoor A, Hou P, Chen Z, Wang Q, Nezi L, Xu Z, Yao J, Hu B, Pettazzoni P, Ho I, Feng N, Ramamoorthy V, Jiang S, Deng P, Ma G, Den P, Tan Z, Zhang S, Wang H, Wang Y, Deem A, Fleming J, Carugo A, Heffernan T, Maitra A, Viale A, Ying H, Hanash S, DePinho R, Draetta G. (2019) Syndecan 1 is a critical mediator of macrophage invasion in pancreatic cancer. <i>Nature.</i> doi:10.1038/s41586-019-1062-1.
Pancreatic Cancer	CloneTracker™ 50M Lentiviral Library	 Seth S, Li C, Ho I, Corti D, Loponte S, Sapio L, Del Poggetto E, Yen E, Robinson F, Peoples M, Karpinets T, Deem A, Kumar T, Song X, Jiang S, Kang Y, Fleming J, Kim M, Zhang J, Maitra A, Heffernan T, Giuliani V, Genovese G, Futreal A, Draetta G, Carugo A, Viale A. (2019) Pre-existing Functional Heterogeneity of Tumorigenic Compartment as the Origin of Chemoresistance in Pancreatic Tumors. <i>Cell Rep.</i> 26(6):1518-1532.e9. doi:10.1016/j.celrep.2019.01.048.
Pancreatic Cancer	DECIPHER™ shRNA Libraries: Human Modules 1, 2	 Kaistha BP, Krattenmacher A, Fredebohm J, Schmidt H, Behrens D, Widder M, Hackert T, Strobel O, Hoheisel JD, Gress TM, Buchholz M. (2017) The deubiquitinating enzyme USP5 promotes pancreatic cancer via modulating cell cycle regulators. <i>Oncotarget.</i> ep 12; 8(39): 66215-66225.
Pancreatic Cancer	Custom Human and Mouse Lentiviral shRNA Libraries & Custom Lentiviral Barcode Library	 Carugo A, Genovese G, Seth S, Nezi L, Rose JL, Bossi D, Cicalese A, Shah PK, Viale A, Pettazzoni PF, Akdemir KC, Bristow CA, Robinson FS, Tepper J, Sanchez N, Gupta S, Estecio MR, Giuliani V, Dellino GI, Riva L, Yao W, Di Francesco ME, Green T, D'Alesio C, Corti D, Kang Y, Jones P, Wang H, Fleming JB, Maitra A, Pelicci PG, Chin L, DePinho RA, Lanfrancone L, Heffernan TP, Draetta GF. (2016) In Vivo Functional Platform Targeting Patient-Derived Xenografts Identifies WDR5-Myc Association as a Critical Determinant of Pancreatic Cancer. <i>Cell Rep</i> 16(1):133-47. PMID: 27320920
Pancreatic Cancer	CloneTracker™ 50M Lentiviral Barcode Library	 Sancho P, Burgos-Ramos E, Tavera A, Bou Kheir T, Jagust P, Schoenhals M, Barneda D, Sellers K, Campos-Olivas R, Graña O, Viera CR, Yuneva M, Sainz B, Heesch C. (2015) MYC/PGC-1 Balance Determines the Metabolic Phenotype and Plasticity of Pancreatic Cancer Stem Cells. <i>Cell Metab.</i> 22(4):590-605. PMID: 26365176
Prostate Cancer	Custom Human Lentiviral shRNA Library	 Mounir Z, Korn JM, Westerling T, Lin F, Kirby CA, Schirle M, McAllister G, Hoffman G, Ramadan N, Hartung A, Feng Y, Kipp DR, Quinn C, Fodor M, Baird J, Schoumacher M, Meyer R, Deeds J, Buchwalter G, Stams T, Keen N, Sellers WR, Brown M, Pagliarini RA. (2016) ERG signaling in prostate cancer is driven through PRMT5-dependent methylation of the Androgen Receptor. <i>Elife.</i> May 16;5. pii: e13964. doi: 10.7554/eLife.13964. PMID: 27183006
Small-Cell Carcinoma of the Ovary	Custom CRISPR Human sgRNA Library & 195 Cell Lines Screened	 Chan-Penebre E, Armstrong K, Drew A, Grassian AR, Feldman I, Knutson SK, Kuplast-Barr K, Roche M, Campbell J, Ho P, Copeland RA, Chesworth R, Smith JJ, Keilhack H, Ribich SA. (2017) Selective Killing of SMARCA2- and SMARCA4-deficient Small Cell Carcinoma of the Ovary, Hypercalcemic Type Cells by Inhibition of EZH2: In Vitro and In Vivo Preclinical Models. <i>Molecular Cancer Therapeutics.</i> May;16(5):850-860. doi: 10.1158/1535-7163.MCT-16-0678.
Blood Transcriptomic Markers	DriverMap™ Targeted Expression Profiling Service	 Tarca A, Romero R, Xu Z, Gomez-Lopez N, Erez O, Hsu C, Hassan S, Carey V. (2019) Targeted expression profiling by RNA-Seq improves detection of cellular dynamics during pregnancy and identifies a role for T cells in term parturition. <i>Sci Rep.</i> 9(1). doi:10.1038/s41598-018-36649-w.