Oncomine Solutions for clinical oncology research

Oncomine[™] Solutions offer end-to-end workflows that address specific challenges when implementing next-generation sequencing (NGS) for clinical oncology research. We understand that NGS applications and content need

to be tailored for your lab's needs. That's why we offer two types of workflows, a broad assay portfolio, complete bioinformatics, and technical support to suit the way you work.

Our menu of Ion Torrent[™] Oncomine[™] assays is continually expanding.*

FFPE tissue testing	Hematology-oncology solutions	Liquid biopsy testing solutions	Immuno-oncology solutions
Oncomine Precision Assay (GX): fast, targeted genomic profiling across 50 genes that enables hands-free detection of key biomarkers in one day; compatible with FFPE or liquid biopsy specimens	Oncomine Myeloid Assay (GX): profiling of multiple relevant driver genes associated with myeloid malignancies	Oncomine Precision Assay (GX): fast, targeted genomic profiling across 50 genes that enables hands-free detection of key biomarkers in one day; compatible with FFPE or liquid biopsy specimens	Oncomine TCR Beta-LR Assay (GX): measurement of T cell diversity and clonal expansion from all regions of the T cell beta chain, i.e., CDR1, 2, and 3
Oncomine Comprehensive Assay Plus: comprehensive genomic profiling across >500 genes, plus key immuno-oncology research biomarkers like tumor mutational burden (TMB), microsatellite instability (MSI), and homologous recombination deficiency (HRD)	Oncomine BCR Pan-Clonality Assay: profiling of multiple B cell receptor targets (IHG, IgK, IgL, KDE, c-intron) with a single assay	Oncomine cfDNA Assays for Lung, Breast, and Colon: plasma analysis of cell-free DNA (cfDNA) for specific cancer sample types with targeted cfDNA assays	Oncomine Comprehensive Assay Plus: comprehensive genomic profiling across >500 genes, plus key immuno oncology research biomarkers like tumor mutational burden (TMB), microsatellite instability (MSI), and homologous recombination deficiency (HRD)
Oncomine tumor-specific panels: focused, predesigned cancer research panels with content relevant for clinical research including a predesigned homologous recombination repair (HRR) panel	Oncomine TCR Pan-Clonality Assay: profiling of multiple T cell receptor targets (TCRB, TCRG) with a single assay	Oncomine Breast cfDNA Assay v2: plasma analysis of cell-free DNA for breast cancer–re- lated variants including high coverage of <i>TP53</i>	Oncomine Tumor Mutation Load Assay: quantitative assessment of TMB
	Oncomine IGHV Leader-J Assay: accurate measurement of somatic hypermutation across the BCR IGHV gene		Oncomine TCR Beta-SR Assay: identification of T cell clones; measurement of clonal expansion from CDR3 of the T cell beta chain
Oncomine Comprehensive Assay v3 (GX): detects relevant SNVs, CNVs, gene fusions, and indels from 161 unique cancer-associated genes in one streamlined workflow	Oncomine Lymphoma Assay: profiling of key lymphoma-associated genes; customization of the panel with additional targets to suit your needs	Oncomine Lung Cell-Free Total Nucleic Acid Research Assay: plasma analysis of cfDNA and cell-free RNA (cfRNA) for lung cancer– related variants and tumor suppressor genes	Oncomine Immune Response Research Assay: gene expression of tumor-immune system interactions
Oncomine Focus Assay: enables simultaneous detection of hundreds of variants across 52 genes relevant to solid tumors; compatible with FFPE fine needle aspirates and core needle biopsies	Oncomine Childhood Cancer Research Assay: comprehensive genomic profiling of childhood and young-adult cancer samples	Oncomine Pan-Cancer Cell-Free Assay: plasma analysis of cfDNA and cfRNA across 18 different cancer sample types	Oncomine TCR Pan-Clonality Assay: predicting immunotherapy response and adverse events through next-generation sequencing of peripheral blood T cell repertoires
Oncomine BRCA Research Assay: 100% exonic coverage of <i>BRCA1</i> and <i>BRCA2</i> genes, large indels, and exon or whole-gene deletion			

Coming soon'

Oncomine Comprehensive Assay Plus (GX)

Oncomine BRCA Research Assay (GX)

* Portfolio as of August 2021.

or duplication

** The content provided herein may relate to products that have not been officially released and is subject to change without notice.



Key: "(GX)" indicates availability on the Ion Torrent" Genexus" System. All others are available on the Ion GeneStudio" S5 System.

Choose from a broad menu of both targeted and pan-cancer research assays for biomarker testing from FFPE tissue and blood samples.

Application area	Assay	# Genes	FFPE sample	Blood sample	DNA	RNA	Hotspots	CNVs	Fusions	Gene expression	Ion Chef [®] System	Ion GeneStudio" S5 System	Ion Torrent" Genexus" System
FFPE tissue testing	Oncomine Precision Assay (GX)	50	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				\checkmark
	Oncomine Comprehensive Assay Plus	500+	\checkmark		\checkmark	\checkmark	\checkmark	✓	\checkmark			\checkmark	
	Oncomine Comprehensive Assay v3 (GX)	161	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
	Oncomine Focus Assay	52	\checkmark		\checkmark	\checkmark	\checkmark	 ✓ 	\checkmark		\checkmark	\checkmark	
	Oncomine BRCA Research Assay	2	\checkmark		\checkmark		\checkmark				\checkmark	\checkmark	
	Oncomine tumor-specific panels	≤30	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark	
Hematology- oncology solutions	Oncomine Myeloid Assay (GX)	69		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
	Oncomine BCR Pan-Clonality Assay		\checkmark	\checkmark	\checkmark						\checkmark	\checkmark	
	Oncomine TCR Pan-Clonality Assay		\checkmark	\checkmark	\checkmark						\checkmark	\checkmark	
	Oncomine IGHV Leader-J Assay		\checkmark	\checkmark	\checkmark						\checkmark	\checkmark	
	Oncomine Lymphoma Assay	25	\checkmark	\checkmark	\checkmark		\checkmark				\checkmark	\checkmark	
	Oncomine Childhood Cancer Research Assay	203	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	
Liquid biopsy testing solutions	Oncomine cfDNA Assays for Lung, Breast, and Colon	≤14		~	~		~					~	
	Oncomine Breast cfDNA Assay v2	12		\checkmark	\checkmark		\checkmark	 ✓ 				\checkmark	
	Oncomine Lung Cell-Free Total Nucleic Acid Research Assay	12		~	~	~	~	~	\checkmark			~	
	Oncomine Pan-Cancer Cell-Free Assay	52		\checkmark	\checkmark	\checkmark	\checkmark	 ✓ 	\checkmark			\checkmark	
	Oncomine Precision Assay (GX)	50	\checkmark	\checkmark	\checkmark	\checkmark	✓	 ✓ 	\checkmark				\checkmark
Immuno-oncology solutions	Oncomine Comprehensive Assay Plus	500+	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	
	Oncomine Immune Response Research Assay	395	\checkmark		\checkmark					\checkmark	\checkmark	\checkmark	
	Oncomine TCR Beta-LR Assay (GX)		\checkmark	\checkmark		\checkmark						\checkmark	\checkmark
	Oncomine TCR Beta-SR Assay		\checkmark	\checkmark	\checkmark	\checkmark						\checkmark	
	Oncomine Tumor Mutation Load Assay	409	\checkmark		\checkmark		\checkmark				\checkmark	\checkmark	
	Oncomine TCR Pan-Clonality Assay		\checkmark	\checkmark	\checkmark						\checkmark	\checkmark	

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Find out more at **oncomine.com/assays**



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