

## Oncomine Breast cfDNA Assay

Enables detection of primary driver and resistance mutations from cell-free DNA down to 0.1%

The Ion Torrent™ Oncomine™ Breast cfDNA Assay is a multibiomarker next-generation sequencing (NGS) assay that enables detection of primary driver and resistance mutations from cell-free DNA (cfDNA) down to a level of 0.1%.

- Single tube of blood—the end-to-end two-day workflow is enabled from NGS
- Low limit of detection—variant detection for SNV hotspots and indels
- High-value content—including more than 150 SNV hotspots identified by the OncoNetwork consortium and other clinical researchers around the world

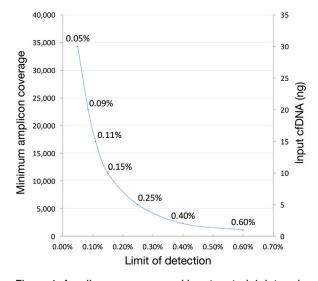


Figure 1. Amplicon coverage and input material determine limit of detection using the Oncomine Breast cfDNA Assay.

Genes	Selected SNV hotspots	
AKT1, EGFR, ERBB2, ERBB3, ESR1, FBXW7, KRAS, PIK3CA, SF3B1, TP53	PIK3CA:	E545K and H1047R
	AKT1:	E17K
	ESR1:	Mutations associated with anti-estrogen resistance
	TP53:	Mutations associated with loss of function
	ERBB2:	Mutations associated with sensitivity to anti- ERBB2 therapies



## **ion**torrent

- Sample tolerance—flexible input amounts as low as 1 ng, and tolerance of sample input variability to accommodate more of your samples
- Cost-effective—uniform coverage of tumor type specific amplicons enables optimization of samples per sequencing run
- Optimized analysis—the variant caller helps increase sensitivity and specificity, providing information on mutation percentage



When combined with Ion Torrent<sup>™</sup> sequencing systems, the assay is part of an accurate, reproducible workflow from blood sample to variant data in two days (Figure 2).

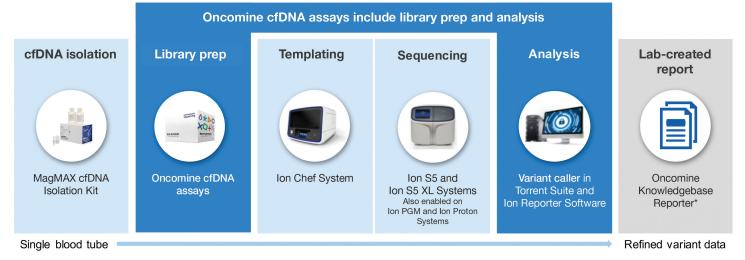


Figure 2. Comprehensive workflow for cfDNA provides streamlined analysis of genes and hotspots.

## **Ordering information**

Product	Cat. No.
Oncomine Breast cfDNA Assay	A31183
Tag Sequencing Barcode Set 1-24	A31830
Tag Sequencing Barcode Set 25-48	A31847
Applied Biosystems <sup>™</sup> MagMAX <sup>™</sup> cfDNA Isolation Kit	A29319

 $The \ Oncomine \ cfDNA \ assays \ are \ enabled \ on \ the \ Ion \ S5^{^{1\!\!1\!\!M}} \ System, \ Ion \ Proton^{^{1\!\!1\!\!M}} \ System, \ and \ Ion \ PGM^{^{1\!\!1\!\!M}} \ System.$ 



 $<sup>^*\ \</sup>mathsf{Oncomine}^{\scriptscriptstyle{\mathsf{TM}}}\ \mathsf{Knowledge} \\ \mathsf{base}\ \mathsf{Reporter}\ \mathsf{is}\ \mathsf{enabled}\ \mathsf{in}\ \mathsf{Ion}\ \mathsf{Reporter}^{\scriptscriptstyle{\mathsf{TM}}}\ \mathsf{Software}\ \mathsf{version}\ 5.2\ \mathsf{or}\ \mathsf{later}.$