



Oncomine Childhood Cancer Research Assay

Cancer in children and young adults is different

The Ion Torrent™ Oncomine™ Childhood Cancer Research Assay is a unique next-generation sequencing (NGS)–based tool designed for comprehensive genomic profiling of cancers affecting children and young adults. Since the driving genetic aberrations of these malignancies are different than those affecting adults, a specific and comprehensive panel is needed to advance research. Our panel is targeted to drive the future of precision medicine in pediatric oncology.

Unique content for comprehensive coverage

- Compiled by leading researchers and pediatric oncologists
- 203 unique genes, including thousands of fusion drivers and comprehensive mutation coverage

Optimized workflow for fast results

- End-to-end solution, including informatics
- From sample to report in 2–3 days, depending on sample type
- Different sample types, including blood, bone marrow, and formalin-fixed, paraffin-embedded (FFPE) tissue

International Childhood Oncology Network (ICON)

- Free membership available for every user
- Access the new variant database platform for result comparison and collaborative projects

“The Oncomine Childhood Cancer Research Assay is the first panel designed for multiple forms of childhood cancer. Of particular importance, it assays both RNA and DNA, which allows one to detect both gene fusions and DNA mutations, both of which are important research.

“I am also very excited by the establishment of the International Childhood Cancer Network (ICON), which will allow us to collect data and share our experience in order to drive clinical research in childhood cancer.”

Timothy Triche, MD, PhD
Founding Director of the Children’s Hospital
Los Angeles Center for Personalized Medicine

ICON is helping increase our knowledge of childhood cancer

As a user of the OncoPrint Childhood Cancer Research Assay, you will be invited to become a member of ICON, established by Thermo Fisher Scientific and Children's Hospital Los Angeles (CHLA). The aim of this organization is to connect research all over the world to facilitate collaboration and sharing, including protocols and best-practice samples, to enable rapid validation and ongoing quality assessment. Members will also have access to the CHLA Childhood Cancer Knowledge Base (CCKB), which houses key variant call results related to a multitude of childhood cancers—enabled by the Ion Torrent™ OncoPrint™ Informatics page in Ion Reporter™ Software.

Find out more about the benefits of ICON membership at thermofisher.com/oncoPrint-childhood



Table 1. OncoPrint Childhood Cancer Research Assay Content.

Comprehensive mutation coverage (86)				CNV (28)		Full exon coverage (44)			Fusion and expression (97)					Gene expression	
ABL1	CSF1R	GATA2	MAP2K2	RAF1	ALK	IGF1R	APC	GATA3	RUNX1	ABL1	FGFR2	MEF2B	NUP214	SSBP2	BCL2
ABL2	CSF3R	GNAQ	MET	RET	BRAF	JAK1	ARID1A	GNA13	SMARCA4	ABL2	FGFR2	MET	NUP98	STAG2	BCL6
ALK	CTNNB1	H3F3A	MPL	RHOA	CCND1	JAK2	ARID1B	ID3	SMARCB1	AFF3	FGFR3	MKL1	NUTM1	STAT6	FGFR1
ACVR1	DAXX	HDAC9	MSH6	SETBP1	CDK4	JAK3	ATRX	IKZF1	SOCS2	ALK	FLT3	MLLT10	NUTM2B	TAL1	FGFR4
AKT1	DNMT3A	HIST1H3B	MTOR	SETD2	CDK6	KIT	CDKN2A	KDM6A	SUFU	BCL11B	FOSB	MN1	PAX3	TCF3	IGF1R
ASXL1	EGFR	HRAS	NCOR2	SH2B3	EGFR	KRAS	CDKN2B	KMT2D	SUZ12	BCOR	FUS	MYB	PAX5	TFE3	MET
ASXL2	EP300	IDH1	NOTCH1	SH2D1A	ERBB2	MDM2	CEBPA	MYOD1	TCF3	BCR	GLI1	MYBL1	PAX7	TP63	MYCN
BRAF	ERBB2	IDH2	NPM1	SMO	ERBB3	MDM4	CHD7	NF1	TET2	BRAF	GLIS2	MYH11	PDGFB	TSLP	MYC
CALR	ERBB3	IL7R	NRAS	STAT3	FGFR1	MET	CRLF1	NF2	TP53	CAMTA1	HMGA2	MYH9	PDGFRA	TSPAN4	TOP2A
CBL	ERBB4	JAK1	NT5C2	STAT5B	FGFR2	MYC	DDX3X	PHF6	TSC1	CCND1	JAK2	NCOA2	PDGFRB	UBTF	
CCND1	ESR1	JAK2	PAX5	TERT	FGFR3	MYCN	DICER1	PRPS1	TSC2	CIC	KAT6A	NCOR1	PLAG1	USP6	
CCND3	EZH2	JAK3	PDGFRA	TPMT	FGFR4	PDGFRA	EBF1	PSMB5	WHSC1	CREBBP	KMT2A	NOTCH1	RAF1	WHSC1	
CCR5	FASLG	KDM4C	PDGFRB	USP7	GLI1	PIK3CA	EED	PTCH1	WT1	CRLF2	KMT2B	NOTCH2	RANBP17	YAP1	
CDK4	FBXW7	KDR	PIK3CA	ZMYM3	GLI2		FAS	PTEN	XIAP	CSF1R	KMT2C	NOTCH4	RECK	ZMYND11	
CIC	FGFR2	KIT	PIK3R1			GATA1	RB1		DUSP22	KMT2D	NPM1	RELA	ZNF384		
CREBBP	FGFR3	KRAS	PPM1D						EGFR	LMO2	NR4A3	RET			
CRLF2	FLT3	MAP2K1	PTPN11						ETV6	MAML2	NTRK1	ROS1			
									EWSR1	MAN2B1	NTRK2	RUNX1			
									FGFR1	MECOM	NTRK3	SS18			

Ordering information

Product	Description	Cat. No.
OncoPrint Childhood Cancer Research Assay	Chef-Ready Library	A36486
	Manual Library	A36485

Get more information at thermofisher.com/oncoPrint-childhood