

Pan-Cancer 405 Panel

Key Benefits

1. Highly comprehensive & optimized for solid cancers

- Identifies mutations implicated in various somatic cancers, e.g. breast, colorectal, gastric, liver cancer, and etc.

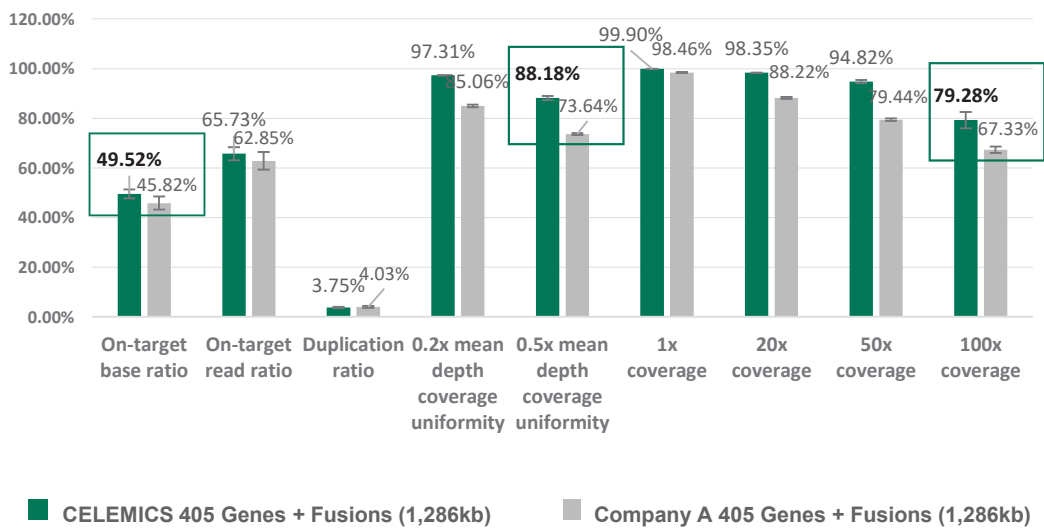
2. Immunotherapy biomarkers analysis

- Tumor mutation burden (TMB) score and microsatellite instability (MSI) analysis available

3. Industry-leading performance

- Provides even higher target enrichment efficiency than competitors', comparing the same target regions (Referred to the figure below)

CELEMICS vs Company A (405 genes + Fusions)



Specifications

Targets	405 genes + Fusions relevant to solid cancers
Covered Region	CDS + Intron(Gene fusions)
Target size	1,286 kb
Target Enrichment	In-solution Hybridization
Minimum input DNA	> 50ng (high quality samples)
Multiplexing	Up to 384 indexing available
Compatible platforms	All Illumina, Ion Torrent, MGISEQ



Pan Cancer 405 Gene Panel

ABL1	BRCA1	CTLA4	ETV4	FOXP3	IGF2	LYN	NOTCH4	PPP2R1A	RUNX1
ABL2	BRCA2	CTNNA1	ETV5	FRS2	IGF2R	LZTR1	NPM1	PRDM1	RUNX1T1
ADGRA2	BRD2	CTNNB1	ETV6	FUBP1	IKBKE	MAGI2	NRAS	PREX2	RUNX3
AKT1	BRD3	CUL3	EWSR1	GABRA6	IKZF1	MAGOH	NSD1	PRF1	SDHA
AKT2	BRD4	CUL4A	EYA2	GAS6	IL12A	MAML1	NSD3	PRKAR1A	SDHB
AKT3	BRIP1	CUL4B	EZH2	GATA1	IL12B	MAP2K1	NTRK1	PRKCI	SDHC
ALK	BTG1	CXCL10	FANCA	GATA2	IL2	MAP2K2	NTRK2	PRKDC	SDHD
AMER1	BTK	CXCL11	FANCC	GATA3	IL23A	MAP2K4	NTRK3	PRPF40B	SEMA3A
APC	BTLA	CXCL9	FANCD2	GATA4	IL6	MAP3K1	NUP93	PRSS8	SEMA3E
APCDD1	CARD11	CXCR3	FANCE	GATA6	IL7R	MAP3K13	NUTM1	PTCH1	SET
APEX1	CASP5	CYLD	FANCF	GID4	INHBA	MAPK1	PAK3	PTCH2	SETBP1
APOB	CASP8	CYP17A1	FANCG	GLI1	INPP4B	MAX	PAK5	PTEN	SETD2
APOBEC1	CBFB	DAXX	FANCI	GNA11	INSR	MCL1	PALB2	PTK2	SF3A1
AR	CBL	DCUN1D1	FANCL	GNA13	IRF2	MDM2	PARP1	PTPN11	SF3B1
ARAF	CDK12	DDR2	FANCM	GNAQ	IRF4	MDM4	PARP2	PTPRC	SH2B3
ARFRP1	CDK4	DICER1	FAS	GNAS	IRS2	MED12	PARP3	PTPRD	SKP2
ARID1A	CDK6	DIS3	FAT1	GRIN2A	ITGAE	MEF2B	PARP4	QKI	SLIT2
ARID1B	CDK8	DNMT1	FAT3	GRM3	ITK	MEN1	PAX5	RAB35	SMAD2
ARID2	CDKN1A	DNMT3A	FBXW7	GSK3B	JAK1	MET	PBRM1	RAC1	SMAD3
ASXL1	CDKN1B	DOCK2	FGF1	GUCY1A2	JAK2	MITF	PDCD1	RAC2	SMAD4
ATM	CDKN2A	DOT1L	FGF10	GZMA	JAK3	MLH1	PDCD1LG2	RAD17	SRSF2
ATP11B	CDKN2B	EGFR	FGF12	GZMB	JUN	MPL	PDGFRA	RAD50	SRSF7
ATR	CDKN2C	ELMO1	FGF14	GZMH	KAT6A	MRE11	PDGFRB	RAD51	STAG2
ATRX	CDX2	EML4	FGF19	H3F3A	KDM5A	MSH2	PDK1	RAD52	STAT3
AURKA	CEBPA	EMSY	FGF2	HGF	KDM5C	MSH6	PGR	RAD54L	STAT4
AURKB	CHD1	EP300	FGF23	HIST1H3B	KDM6A	MTOR	PHF6	RAF1	TERT
AXIN1	CHD2	EPHA3	FGF3	HNF1A	KDR	MUTYH	PHLPP2	RANBP2	TET2
AXL	CHD4	EPHA5	FGF4	HOXA3	KEAP1	MYB	PIK3C2B	RARA	
B2M	CHEK1	EPHA6	FGF6	HRAS	KEL	MYC	PIK3C3	RB1	
B3GAT1	CHEK2	EPHA7	FGF7	HSD3B1	KIT	MYCL	PIK3CA	RBM10	
BACH1	CHUK	EPHB1	FGFR1	HSP90AA1	KLF4	MYCN	PIK3CB	REL	
BAP1	CIC	EPHB4	FGFR2	IDH1	KLHL6	MYD88	PIK3CG	RET	
BARD1	CRBN	EPHB6	FGFR3	IDH2	KMT2A	MYO18A	PIK3R2	RHEB	
BCL2	CREBBP	ERBB2	FGFR4	IDO1	KMT2B	NCOA3	PKHD1	RHOA	
BCL6	CRKL	ERBB3	FH	IDO2	KMT2C	NCOR1	PLCG1	RHOB	
BCL9	CRLF2	ERBB4	FLCN	IFITM1	KNSTRN	NF1	PLCG2	RICTOR	
BCOR	CSF1R	ERCC1	FLT1	IFITM3	KRAS	NF2	PMS2	ROBO1	
BCR BLM	CSF2 CSNK2A1	ERCC2 ESR1	FLT3 FOXL2	IFNA1 IGF1	LAG3 LRP6	NEE2L2 NOTCH2	PNP POLE	ROBO2 RPS6KB1	
BIRC2 BRAF	CSF2RA CTCF	ERG ETV1	FLT4 FOXO3	IFNB1 IGF1R	LMO1 LTK	NFKBIA NOTCH3	PNRC1 PPARG	ROS1 RPTOR	
BIRC3	CSF2RB	ERRF1	FOXA1	IFNG	LRP1B	NOTCH1	POLD1	RPA1	