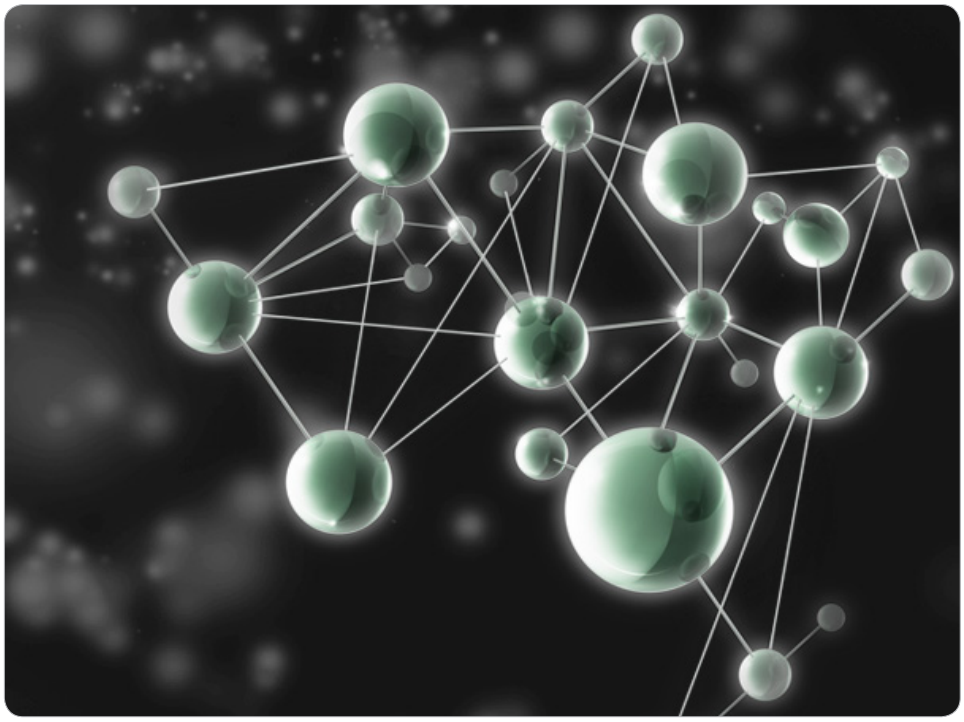
nCounter®
GX Human Kinase Kit



Product Highlights

Highly Curated

- Our expert bioinformaticists use a very rigorous process in selecting the most meaningful set of genes

Efficient

- Multiplexed assay profiles 522 human kinase genes in a single reaction

Cost-effective

- Gold standard data at a fraction of the cost

Quick Turnaround Time

- Complete kit with all consumables ready to ship next day

nCounter GX Human Kinase Kit

The **nCounter GX Human Kinase Kit** is a comprehensive list of 522 human genes known to be differentially expressed in the kinome.

With the nCounter GX Human Kinase Kit, scientists can leverage a pre-designed panel to accelerate their research and quickly generate expression data for a large panel of protein kinase-related genes.

The gene list was compiled using the KinBase database at www.kinase.com. The database is based on the publication, **The Protein Kinase Complement of the Human Genome**, by G Manning, DB Whyte, R Martinez, T Hunter, S Sudarsanam (2002). *Science* 298:1912-1934.

The nCounter Human Kinase Kit represents 99% of the KinBase content for Human.

The final nCounter GX Human Kinase Kit consists of 522 protein kinase-related genes and 14 internal reference genes. For the gene list and additional information about this gene set, visit the nCounter Pre-built Panels product page at www.nanostring.com.

Home > Products > nCounter Gene Expression CodeSets > **Pre-built Panels**

nCounter Analysis System Overview

The nCounter Analysis System from NanoString offers a cost-effective way to easily profile hundreds of gene transcripts simultaneously with high sensitivity and precision. The digital detection of target molecules and high levels of multiplexing eliminate the compromise between data quality and data quantity, bringing better sensitivity, reproducibility, and linearity to your results. It is ideal for studying defined gene sets across a large sample set, e.g., microarray validation or NGS, pathway analysis, biomarker validation, and splice variation analysis.

The system utilizes a novel digital technology that is based on direct multiplexed measurement of gene expression and offers high levels of precision and sensitivity (<1 copy per cell). The technology uses molecular "barcodes" and single molecule imaging to detect and count hundreds of unique transcripts in a single reaction.

Included

Genes List

AAK1	BUB1	CIT	EPHB1	HPRT1	MAP3K14	MST1R	PDK3	PTK6	SPEG	TNIK
AATK	BUB1B	CLK1	EPHB2	HSPB8	MAP3K15	MST4	PDK4	PTK7	SRC	TNK1
ABL1	C21orf7	CLK2	EPHB3	HUNK	MAP3K2	MTOR	PDPK1	PXK	SRMS	TNK2
ABL2	C9orf96	CLK3	EPHB4	HUS1	MAP3K3	MUSK	PEAK1	RAF1	SRPK1	TNNI3K
ACVR1	CAMK1	CLK4	EPHB6	ICK	MAP3K4	MYLK	PGK1	RAGE	SRPK2	TP53RK
ACVR1B	CAMK1D	CLTC	ERBB2	IGF1R	MAP3K5	MYLK2	PHKG1	RET	SRPK3	TRIB1
ACVR1C	CAMK1G	COL4A3BP	ERBB3	IKBKB	MAP3K6	MYLK3	PHKG2	RIOK1	STK10	TRIB2
ACVR2A	CAMK2A	CPNE3	ERBB4	IKBKE	MAP3K7	MYLK4	PIK3R4	RIOK2	STK11	TRIB3
ACVR2B	CAMK2B	CSF1R	ERN1	ILK	MAP3K8	MYO3A	PIM1	RIOK3	STK16	TRIM24
ACVRL1	CAMK2D	CSK	ERN2	INSR	MAP3K9	MYO3B	PIM2	RIPK1	STK17A	TRIM28
ADCK1	CAMK2G	CSNK1A1	FASTK	INSRR	MAP4K1	NEK1	PIM3	RIPK2	STK17B	TRIM33
ADCK2	CAMK4	CSNK1A1L	FASTKD1	IRAK1	MAP4K2	NEK10	PINK1	RIPK3	STK19	TRIO
ADCK3	CAMKK1	CSNK1D	FASTKD2	IRAK2	MAP4K3	NEK11	PKDCC	RIPK4	STK24	TRPM6
ADCK4	CAMKK2	CSNK1E	FASTKD3	IRAK3	MAP4K4	NEK2	PKMYT1	RNASEL	STK25	TRPM7
ADCK5	CAMKV	CSNK1G1	FASTKD5	IRAK4	MAP4K5	NEK3	PKN1	ROCK1	STK3	TRRAP
ADRBK1	CASK	CSNK1G2	FER	ITK	MAPK1	NEK4	PKN2	ROCK2	STK31	TSSK1B
ADRBK2	CCL2	CSNK1G3	FES	JAK1	MAPK10	NEK5	PKN3	ROR1	STK32A	TSSK2
AKT1	CDC42BPA	CSNK2A1	FGFR1	JAK2	MAPK11	NEK6	PLK1	ROR2	STK32B	TSSK3
AKT2	CDC42BPB	CSNK2A2	FGFR2	JAK3	MAPK12	NEK7	PLK2	ROS1	STK32C	TSSK4
AKT3	CDC42BPG	DAPK1	FGFR3	KALRN	MAPK13	NEK8	PLK3	RPS6KA1	STK33	TSSK6
ALK	CDC7	DAPK2	FGFR4	KDR	MAPK14	NEK9	PLK4	RPS6KA2	STK35	TTBK1
ALPK1	CDK1	DAPK3	FGFRL1	KIAA1804	MAPK15	NIM1	PNCK	RPS6KA3	STK36	TTBK2
ALPK2	CDK10	DCLK1	FGR	KIT	MAPK3	NLK	PRKAA1	RPS6KA4	STK38	TTK
ALPK3	CDK11A	DCLK2	FLJ25006	KSR1	MAPK4	NPR1	PRKAA2	RPS6KA5	STK38L	TTN
AMHR2	CDK12	DCLK3	FLT1	KSR2	MAPK6	NPR2	PRKACA	RPS6KA6	STK39	TUBB
ANKK1	CDK13	DDR1	FLT3	LATS1	MAPK7	NRBP1	PRKACB	RPS6KB1	STK4	TXK
ARAF	CDK14	DDR2	FLT4	LATS2	MAPK8	NRBP2	PRKACG	RPS6KB2	STK40	TYK2
ATM	CDK15	DMPK	FRK	LCK	MAPK9	NRK	PRKCA	RPS6KC1	STRADA	TYRO3
ATR	CDK16	DSTYK	FYN	LIMK1	MAPKAPK2	NTRK1	PRKCB	RPS6KL1	STRADB	UHMK1
AURKA	CDK17	DYRK1A	G6PD	LIMK2	MAPKAPK3	NTRK2	PRKCD	RYK	STYK1	ULK1
AURKB	CDK18	DYRK1B	GAK	LMTK2	MAPKAPK5	NTRK3	PRKCE	SBK1	SYK	ULK2
AURKC	CDK19	DYRK2	GAPDH	LMTK3	MARK1	NUAK1	PRKCG	SBK2	TAF1	ULK3
AXL	CDK2	DYRK3	GRK1	LRRK1	MARK2	NUAK2	PRKCH	SCYL1	TAF1L	ULK4
BCKDK	CDK20	DYRK4	GRK4	LRRK2	MARK3	OBSCN	PRKCI	SCYL2	TAOK1	VRK1
BCR	CDK3	EEF2K	GRK5	LTK	MARK4	OXSR1	PRKCQ	SCYL3	TAOK2	VRK2
BLK	CDK4	EGFR	GRK6	LYN	MAST1	PAK1	PRKCZ	SDHA	TAOK3	VRK3
BMP2K	CDK5	EIF2AK1	GRK7	MAK	MAST2	PAK2	PRKD1	SGK1	TBCK	WEE1
BMPR1A	CDK6	EIF2AK2	GSG2	MAP2K1	MAST3	PAK3	PRKD2	SGK110	TBK1	WEE2
BMPR1B	CDK7	EIF2AK3	GSK3A	MAP2K2	MAST4	PAK4	PRKD3	SGK196	TBRG4	WNK1
BMPR2	CDK8	EIF2AK4	GSK3B	MAP2K3	MASTL	PAK6	PRKDC	SGK2	TEC	WNK2
BMX	CDK9	EPHA1	GUCY2C	MAP2K4	MATK	PAK7	PRKG1	SGK223	TEK	WNK3
BRAF	CDKL1	EPHA10	GUCY2D	MAP2K5	MELK	PAN3	PRKG2	SGK3	TESK1	WNK4
BRD2	CDKL2	EPHA2	GUCY2F	MAP2K6	MERTK	PASK	PRKX	SGK494	TESK2	YES1
BRD3	CDKL3	EPHA3	GUSB	MAP2K7	MET	PBK	PRKY	SIK1	TEX14	YSK4
BRD4	CDKL4	EPHA4	HCK	MAP3K1	MINK1	PDGFRA	PRPF4B	SIK2	TGFBR1	ZAK
BRDT	CDKL5	EPHA5	HIPK1	MAP3K10	MKNK1	PDGFRB	PSKH1	SIK3	TGFBR2	ZAP70
BRSK1	CHEK1	EPHA6	HIPK2	MAP3K11	MKNK2	PDIK1L	PSKH2	SLK	TIE1	
BRSK2	CHEK2	EPHA7	HIPK3	MAP3K12	MLKL	PDK1	PTK2	SMG1	TLK1	
BTK	CHUK	EPHA8	HIPK4	MAP3K13	MOS	PDK2	PTK2B	SNRK	TLK2	

**Internal Reference Genes*

Assay Performance

Description	Specifications
Level of multiplexing	522 genes known to be differentially expressed in the human kinome
Recommended amount of starting material	100 ng or less of purified total RNA, or lysate from ~10,000 cells
Sample types supported	Total RNA, cell lysates in GITC, FFPE-derived total RNA and PAXgene lysed whole blood, amplified RNA
Limit of detection	15 zeptomole spike-in control (~1 copy per cell); 90% of the time
Fold change sensitivity	> 1.5 fold (> 5 copies per cell) > 2 fold change (> 1 copy per cell)
Spike correlation	$R^2 \geq 0.95$
Linear dynamic range	7 x 10^5 total counts
Controls	6 positive and 8 negative in each reaction

Ordering Information

Description	Quantity / Use	Part Number (P/N)
nCounter GX Human Kinase Kit	12 assays 24 assays 48 assays 96 assays	XT-GXA-P2K1-12 XT-GXA-P2K1-24 XT-GXA-P2K1-48 XT-GXA-P2K1-96

NanoString Technologies, Inc.

530 Fairview Ave N
Suite 2000
Seattle, Washington 98109

CONTACT US

info@nanostring.com
Tel: (888) 358-6266
Fax: (206) 378-6288
www.nanostring.com

SALES CONTACTS

United States: us.sales@nanostring.com
EMEA: europe.sales@nanostring.com
Asia Pacific & Japan: apac.sales@nanostring.com
Other Regions: info@nanostring.com