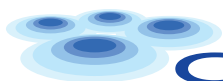


# Cell-Based Tyrosine Kinase Assay Panel



CARNA BIOSCIENCES collaboration with

**ACD** ADVANCED CELLULAR DYNAMICS

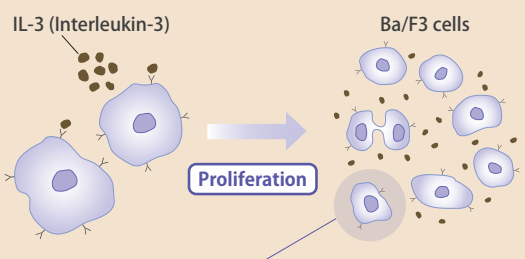
## Largest Commercially Available Panel of Tyrosine Kinase Cell-Based Assays

### Why ACD?



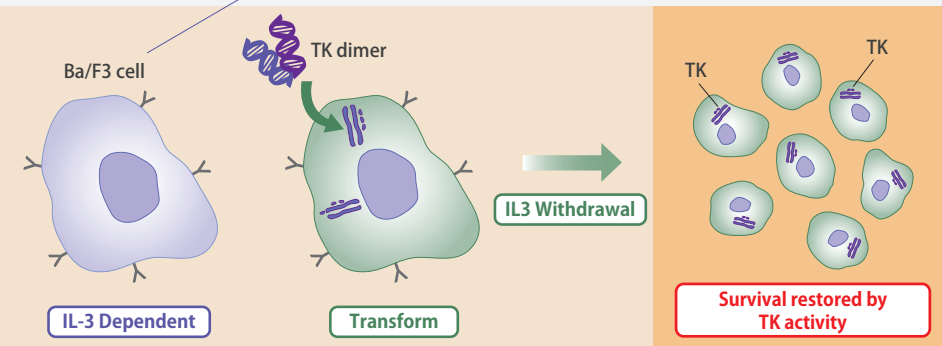
- Comparative cell-based analysis
- To discover direct inhibitory activity to targeted kinases
- Ready-to-run **93** Tyrosine Kinase (TK) Panel
- Time & cost saving solution for your in-house cellular assays

### Principle & Method of ACD Cell-Based Assays

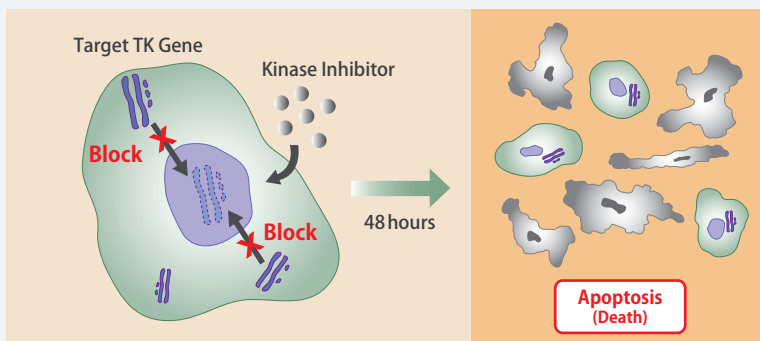


The assay principle builds upon the work of Daley & Baltimore (1988)\* and Jonathan S. Melnick et al. (2005)\*\*

In this system, IL3-dependent Ba/F3 cells are modified to express an activated recombinant kinase. Following removal of IL3, the modified cells are dependent on the activity of the recombinant kinase for survival and proliferation.



Ba/F3 cells are transformed by inducing target kinase dimerization via viral vectors. Activity of the transformed kinase overrides IL3 dependency for cellular proliferation and survival - modified cells no longer require IL3 for growth.



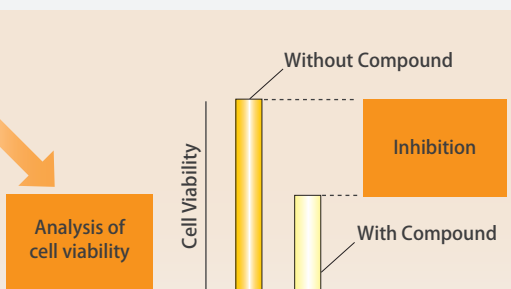
If the kinase inhibitor (compound) specifically blocks the activity of the recombinant kinase, the modified cells undergo programmed cell death (apoptosis).

### About ACD

Advanced Cellular Dynamics (Seattle, WA USA) is a leading provider of cell-based assay panel technologies and services to the life-sciences community. ACD develops and deploys families of cell-based screening assays, encompassing broad representations of important target gene families. Their assays are designed to simplify high-throughput screening and profiling of chemical entities in a physiologically relevant cellular environment.



\* Daley and Baltimore; Proc. Natl. Acad. Sci. USA. 1988; 85(23):9312-6  
 \*\* Melnick et al., Proc. Natl. Acad. Sci. USA. 2005; 102(11):12921-03



Each assay is engineered to be dependent upon maintenance of the introduced kinase activity for survival. Inhibition of this activity results in a directly proportional decrease in cell viability.

Visit our website for more information:  
[www.carnabio.com](http://www.carnabio.com)

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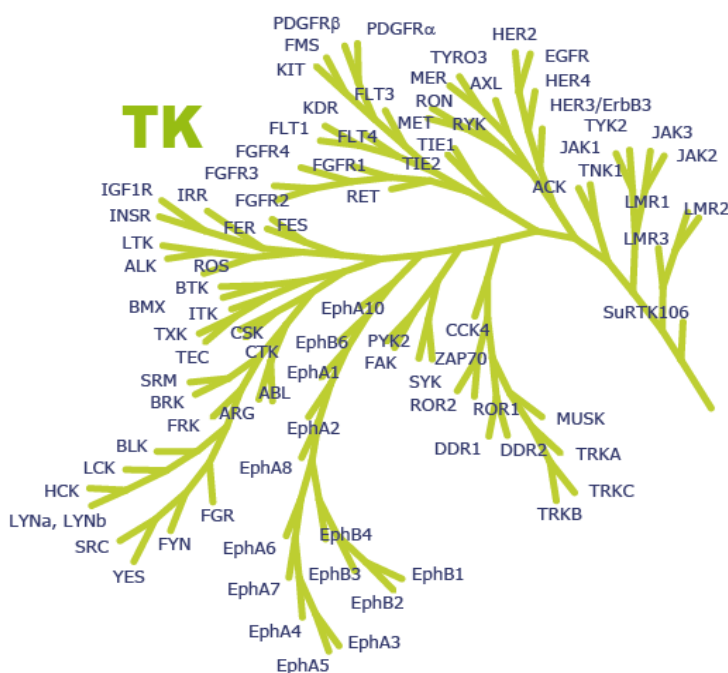
E-mail: [info@carnabio.com](mailto:info@carnabio.com)

## Largest Commercially Available 93 Tyrosine Kinase Cell-Based Panel

Group	Name of Kinase	ACD Cell-Based	Carna 1mM	
Ephrin	EphA1	○	○	
	EphA3	○	○	
	EphA4	○	○	
	EphA5	○	○	
	EphB1	○	○	
	EphB2	○	○	
SYK	FAK	○	○	
	SYK	○	○	
	ZAP70	○	○	
FGF Receptor	FGFR1	○	○	
	FGFR1[V561M]	○	○	
	FGFR2	○	○	
	FGFR2[K660E]	○	○	
	FGFR2[K660N]	○	○	
	FGFR2[N550K]	○	○	
	FGFR2[V565I]	○	○	
	FGFR2/AFF3	○	○	
	FGFR2/BICC1	○	○	
	FGFR2/CASP7	○	○	
	FGFR2/CCDC6	○	○	
	FGFR3	○	○	
	FGFR3[K650M]	○	○	
	FGFR3/BAIAP2L1	○	○	
	FGFR4	○	○	
	FGFR4[V550E]	○	○	
Abelson	ABL (BCR-ABL)	○	○	
	ARG (ABL2)	○	○	
	BLK	○	○	
	EGF Receptor	EGFR	○	○
		EGFR[D746-750]	○	○
		EGFR[D746-750+T790M]	○	○
		EGFR[L858R]	○	○
		EGFR[L858R+T790M]	○	○
		EGFR[L858R+C797S]	○	○
		EGFR[L861Q]	○	○
EGFR[L861Q+T790M]		○	○	
EGFR[T790M]		○	○	
HER2(ERBB2)		○	○	
HER3(ERBB3)		○	○	
PDGF Receptor	FLT3	○	○	
	FLT3-ITD	○	○	
	FLT3-ITD [F691L]	○	○	
	FLT3-ITD [D835V]	○	○	
	FLT3-ITD [D835Y]	○	○	
	FLT3-ITD [Y842C]	○	○	
	FLT3-ITD [Y842H]	○	○	
	FMS (CSF1R)	○	○	
	KIT	○	○	
	KIT[D816V]	○	○	
	KIT[K642E]	○	○	
	KIT[N822H]	○	○	
	KIT[T670I]	○	○	
	KIT[V654A]	○	○	
	PDGFRa	○	○	
PDGFRb	○	○		
TIE1	○	○		
TIE2	○	○		

Group	Name of Kinase	ACD Cell-Based	Carna 1mM
Janus Kinase	JAK1	○	○
	JAK2	○	○
	JAK3	○	○
	TYK2	○	○
Macrophage Stimulating Receptor	AXL	○	○
	CCK4 (PTK7)	○	○
	MER (MERTK)	○	○
	MET	○	○
	RON (MST1R)	○	○
Sarcoma Virus	RYK	○	○
	TYRO3	○	○
	BTK	○	○
	BMX	○	○
	FGR	○	○
	FRK	○	○
	FYN	○	○
Insulin Receptor	HCK	○	○
	LCK	○	○
	LYN	○	○
	SRC	○	○
	ALK	○	○
	DDR2	○	○
	IGF1R	○	○
	INSR	○	○
	ROR1	○	○
	ROS (ROS1)	○	○
TRKA (NTRK1)	○	○	
TRKB (NTRK2)	○	○	
TRKC (NTRK3)	○	○	

Updated: 2017/1/18



The % inhibition or IC<sub>50</sub> value determination studies will be performed with your compounds. The test results will be returned within 4 weeks after a receipt of compounds.