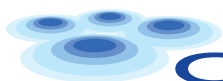


Cell-Based Tyrosine Kinase Assay Panel



CARNA BIOSCIENCES collaboration with

ACD ADVANCED CELLULAR DYNAMICS

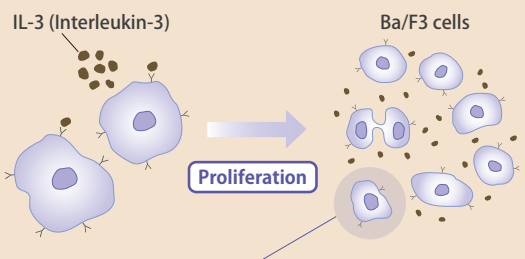
Largest Commercially Available Panel of Tyrosine Kinase Cell-Based Assays

Why ACD?



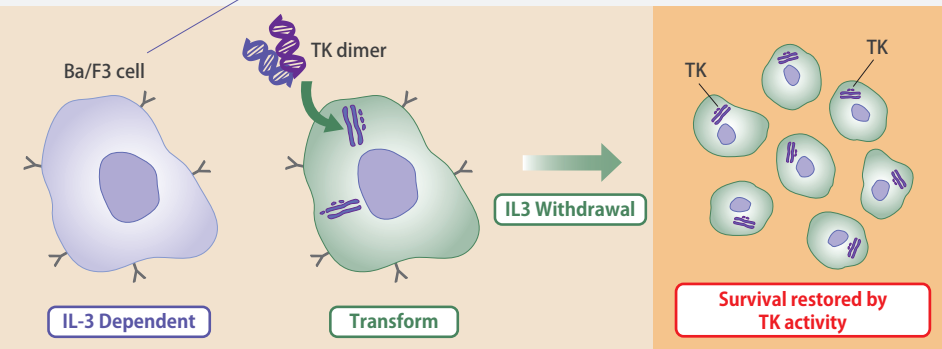
- Comparative cell-based analysis
- To discover direct inhibitory activity to targeted kinases
- Ready-to-run **94** Tyrosine Kinase (TK) Panel
- Time & cost saving solution for your in-house cellular assays

Principle & Method of ACD Cell-Based Assays

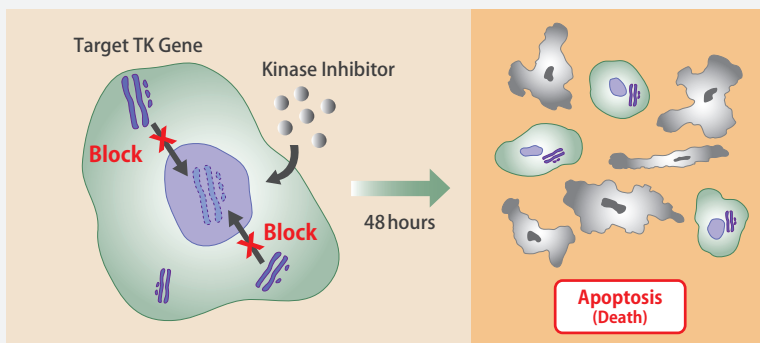


The assay principle builds upon the work of Daley & Baltimore (1988)* and Jonathan S. Melnick et al. (2005)**

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.



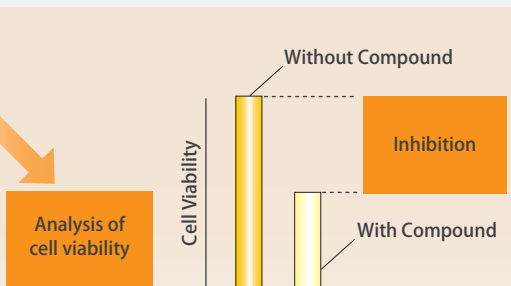
If the kinase inhibitor (compound) specifically blocks the activity of the recombinant kinase, the modified cells undergo programmed cell death (apoptosis).

About ACD

Advanced Cellular Dynamics (San Diego, CA 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

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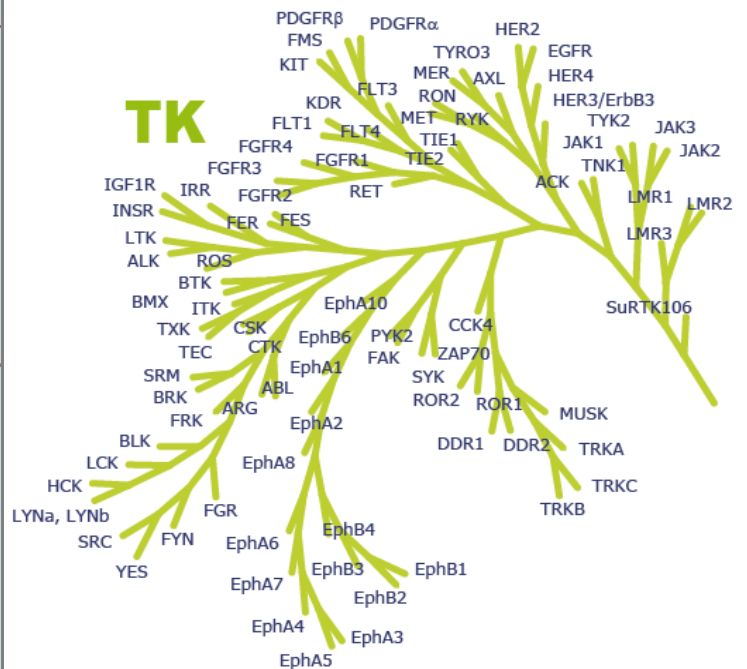
E-mail: info@carnabio.com

Largest Commercially Available 94 Tyrosine Kinase Cell-Based Panel

Group	Name of Kinase	ACD Cell-Based	Carna 1mM
Ephrin	EphA1	○	○
	EphA3	○	○
	EphA4	○	○
	EphA5	○	○
	EphB1	○	○
	EphB2	○	○
	EphB4	○	○
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]	○	○
	FLT1	○	○
	FLT4	○	○
KDR	○	○	
RET	○	○	
RET [V804M]	○	○	
Abelson	ABL (BCR-ABL)	○	○
	ARG (ABL2)	○	○
	BLK	○	○
EGF Receptor	EGFR	○	○
	EGFR[D746-750]	○	○
	EGFR[D746-750+T790M]	○	○
	EGFR[L858R]	○	○
	EGFR[L858R+T790M]	○	○
	EGFR[L858R+T790M+C797S]	○	○
	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]	○	○
	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	○	○
	JAK2 [V617F]	○	○
	JAK3	○	○
	TYK2	○	○
Macrophage Stimulating Receptor	AXL	○	○
	CCK4 (PTK7)	○	○
	MER (MERTK)	○	○
	MET	○	○
	RON (MST1R)	○	○
Sarcoma Virus	RYK	○	○
	TYRO3	○	○
	BTK	○	○
	BMX	○	○
	FGR	○	○
	FRK	○	○
	FYN	○	○
	HCK	○	○
	ITK	○	○
	LCK	○	○
LYN	○	○	
SRC	○	○	
Insulin Receptor	ALK	○	○
	DDR2	○	○
	IGF1R	○	○
	INSR	○	○
	ROR1	○	○
	ROS (ROS1)	○	○
	TRKA (NTRK1)	○	○
	TRKB (NTRK2)	○	○
TRKC (NTRK3)	○	○	

Updated: 2018/12/3



The % inhibition or IC₅₀ value determination studies will be performed with your compounds. The test results will be returned within 4 weeks after a receipt of compounds.