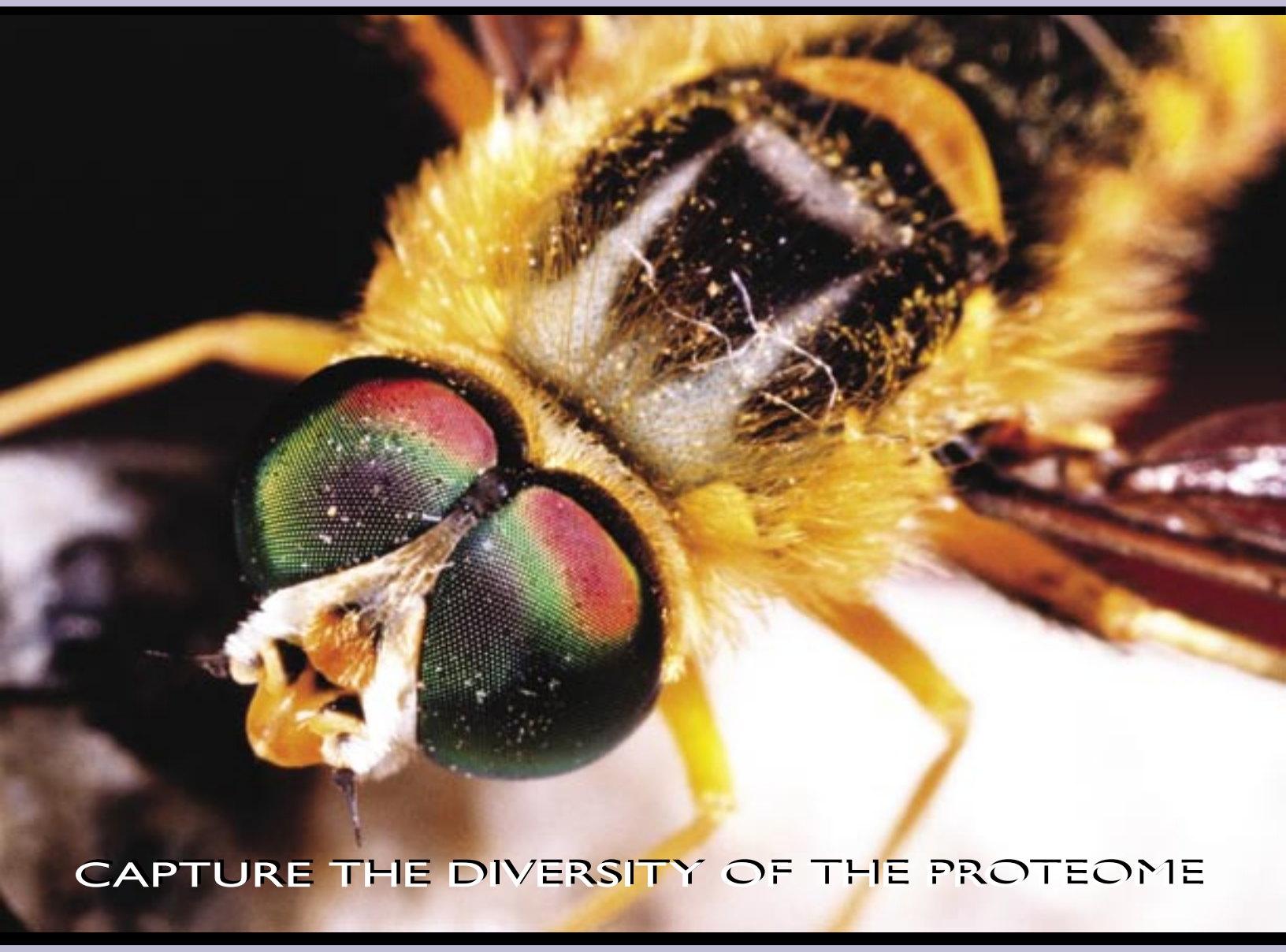
PHOSPHORYLATION - KINASES

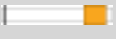


Protein phosphorylation is one of the most significant signal transduction mechanisms by which signals regulate crucial processes such as ion transport, cellular proliferation, and hormone responses. There are more than 500 members of the major classes of protein serine/threonine, tyrosine, and dual specificity kinases within the human genome. Rapid and cascading phosphorylation of target proteins permits dynamic control of cell signaling and subsequent adaptions of cellular physiology in response to changes in environmental and cellular stimuli. Consistent with the complex role of this post-translational modification in the cell, protein kinases can be regulated by activator proteins, inhibitor proteins, ligand binding, regulatory subunits, cofactors, and phosphorylation by other proteins or by themselves (autophosphorylation). To grasp the impact of protein kinases within the cell, consider that approximately one third of mammalian proteins contain covalently bound phosphate. Disruption of protein kinase function or regulation is implicated in a host of major diseases, such as cancer, diabetes and rheumatoid arthritis. Defects in genes that encode protein kinases underlie a number of inherited and acquired disorders, that include leukemias, lymphomas and autoimmune diseases. A comprehensive set of antibodies that cover the human kinome provides a powerful source of reagents to profile protein kinase function, interaction, cellular location, expression and identification of substrates and inhibitors.

LIST OF ANTIBODY PRODUCTS

ABL1	BRD2	CHKL	DRAK2	FES	Haspin	KSR1	MEKK6	NLK	PDK2	PIP5K2A	RBSK	TAO1
ABL2	BRD3	CIT	DTYMK	FGF4	HCK	LATS1	MEKK8	NME1	PDK3	PIP5K2B	RET	TAO2
ACK1	BRD4	CK1a	DYRK2	FGFR1	HGK	LATS2	MERK	NME2	PDK4	PIP5K2G	RFK	TEC
ACVR1	BTK	CK1d	DYRK3	FGFR2	HIPK2	LIMK1	MINK1/2	NME3	PDPK1	PIP5K3	RIPK1	TEK
ACVR1B	BUB1A	CK1e	DYRK4	FGFR3	HIPK3	LIMK2	MKK3	NME4	PDXK	PKA	RIPK2	TESK1
ACVRL1	BUB1B	CK1g1	DYRKA	FGFR4	HK1	LIMK2B	MKK4	NME5	PFKFB1	PKC	RON1	TESK2
ADK	CAMK1	CK1g2	DYRKB	FGR	HK2	LOK	MKK6	NME6	PFKFB2	PKD2	RON2	TGFBR1
AIK	CAMK1g	CK1g3	EEF2K	FLT1	HK3	LRRK1	MKK7	NME7	PFKFB3	PKLR	ROS	TIE
AK1	CAMK2a	CKB	EGFR	FLT2	HPK1	LRRK2	MKNK2	NRBP	PFKFB4	PKM2	RSK1	TK
AK2	CAMK2b	CKM	EIF2AK3	FLT3	HRI	LSK	MLCK	OPHN1L	PFKL	PKN	RSK2	TK2
AK3	CAMK2d	CKMT1	EKI1	FLT4	HSTK12	LTK	MLCK2	P38	PFKM	PKNbeta	RSK3	TLK1
AK5	CAMK2g	CKMT2	EKI2	FN3K	HUNK	LYN	MLCKlong	P38beta	PFKP	PKR1	RSK4	TLK2
AK7	CAMK4	CLK1	EMK	FN3X	ICK	LZK	MLK1	P38delta	PFTK1	PKR2	RV3568C	TNIK
AKL3L	CARKL	CLK2	EPHA1	FRK	IGF1R	MAK	MLK2	P38gamma	PGK1	PLAU	RYK	TNK1
AKT1	Cask	CLK3	EPHA2	FUK	IKBKE	MAP2K1	MLK3	p70S6K	PGK2	PLAUR	SAK	TRKA
AKT2	CCK4	CLK4	EPHA3	FYN	IKKalpha	MAP2K2	MLKLAK	p70S6Kbeta	PHKG1	PLK	SEPSH1	TRKB
AKT3	CDC2L1	CNK	EPHA4	GAK	IKKbeta	MAP2K6	MOK	PACSIN1	PHKG2	PMVK	SEPSH2	TRKC
ALK	CDC2L5	COT	EPHA5	GALK1	IKKgamma	MAP3K9	MOS	PACSIN2	PI3KC2A	PPNK	SGK	TRRAP
ALS2CR7	CDC7L1	CRK7	EPHA6	GALK2	ILK1	MAPK10	MSK1	PACSIN3	PI3KC2B	PRK2	SGK2	TSSK1
AMPK1	CDK1	CSF1R	EPHA7	GCK	ILK2	MAPK11	MSK2	PAK1	PI3KC2G	PRKAB1	SKY	TTK
AMPKa	CDK2	CSK	EPHA8	GCKR	INSR	MAPK12	MSSK1	PAK2	PI3KC3	PRKAB2	SLK	TXK
ANKRD3	CDK3	CSNK2A1	EPHB1	GCN2	INSRR	MAPK13	MST1	PAK3	PI3KCA	PRKAG1	SMG1	TYK2
ANPA	CDK4	CSNK2A2	EPHB2	GKP2/3	IRAK1	MAPK14	MST2	PAK4	PI3KCB	PRKAG2	SNK	TYRO10
ANPB	CDK5	CSNK2B	EPHB3	GLK	IRAK2	MAPK8	MST3	PAK5	PI3KCD	PRKAG3	SPAK	UCK
ANPC	CDK6	DAPK1	EPHB4	GNB2L1	IRAK3	MAPK9	MST4	PAK6	PI3KCG	PRKAR1B	SPHK1	UCK2
ARAF1	CDK7	DAPK2	EPHB6	GPK2/3	IRAK4	MAPKAPK2	MUSK	PANK1	PI3KR1	PRKAR2B	SPHK2	Ulk1
ATM	CDK8	DCAMKL1	EPS8	GPRC1F	ITK	MARK	MVP	PANK2	PI3KR2	PRKDC	SRC	ULK2
ATR	CDK9	DCK	ErbB1	GPRC1G	ITPKA	MARK3	NAGK	PANK3	PI3KR3	PRKR	SRMS	URKL1
AuroraA	CDK10	DGKA	ErbB2	GPRC1H	ITPKB	MARK4	NEK1	PANK4	PI3KR4	PRKWNK3	SRPK1	VRK1
AuroraB	CDKL1	DGKB	ErbB3	GPRK7	JIK	MATK	NEK11L	PAPSS1	PI4KCA	PRKWNK4	SRPK2	VRK2
AuroraC	CDKN1A	DGKD	ErbB4	GRK1	JNK1	MCK10	NEK11S/L	PAPSS2	PI4KCB	PRKX	STK9	VRK3
AXL	CDKN3	DGKE	ERK1	GRK2	JNK2	MEK1	NEK2	PBP	PI4KII	PRP4	STK11	WEE1
BCKDK	CERK	DGKG	ERK2	GRK3	JNK3	MEK2	NEK2B	PCK1	PI4KIIbeta	PRPK	STK16	WNK1
BGLF4	cGKIbeta	DGKI	ERK3	GRK4	KHK	MEK5	NEK3	PCK2	PI5K	PRPS1/2/3	STK19	YANK2
BLK	cGKII	DGKQ	ERK4	GRK5	KHS	MEKK1	NEK4	PCTK1	PIM1	PRSS7	STK22B	YES
BMP2K	CHAK1	DGKZ	ERK5	GRK6	KHS2	MEKK2	NEK6	PCTK2	PIM2	PSKH1	STK29	YSK
BMPR1A	CHAK2	DGUOK	FAK1	GRK7	KIP2	MEKK3	NEK7	PCTK3	PINK1	PSKH2	STK31	YWHAB
BMX	CHK	DLK	FAK2	GSK3A	KIS	MEKK4	NEK8	PDGFRA	PIP5K1A	PTK6	STK33	YWHAZ
BRAF	CHK1	DMPK	FASTK	GSK3B	KIST	MEKK4	NIK	PDGFRB	PIP5K1B	PTK7	SYK	ZAK
BRD1	CHK2	DRAK1	FER	GUK1	KIT	MEKK5	NIPK	PDK1	PIP5K1G	RAF1	TAK1	ZAP70

SELECTED PRODUCT INFORMATION

Name	ACVRL1	BLK	CAMK1γ	CDKL1	DCAMKL1	EphA8	ErbB2	INSR	IRAK1	MATK
Epitope										
Catalog #	AP7807a	AP7697a	AP7253b	AP7526b	AP7219b	AP7613b	AP7629b	AP7653a	AP7802b	AP7714a
Western										
IHC										

• **BC**-Breast Carcinoma • **HC**-Hepatocarcinoma • **IHC**-Immunohistochemistry •

ABGENT
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ABGENT develops innovative reagents and technologies to profile ***post-translational modifications***, which dynamically regulate the functional proteome. These modifications forge a vital link between genotype and phenotype. By targeting these ***post-translational modifications***, ABGENT serves scientists exploring the complex paths between cell signaling and pathology.

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