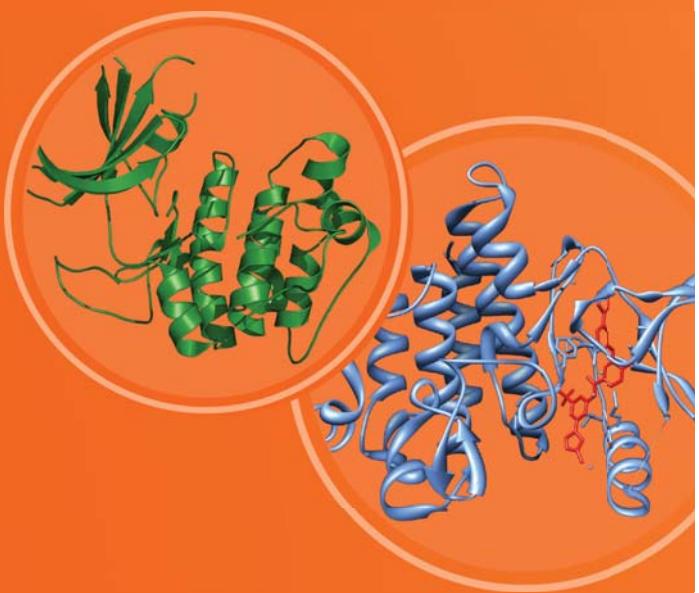




# Growth Factors & Kinases

Growth factors and cytokines are signaling molecules that control cell proliferation, differentiation, apoptosis, immunological/hematopoietic responses, morphogenesis, and maintenance of tissue homeostasis. Their crucial roles make them valuable tools in the study of a wide variety of cell functions and their associated signaling pathways, with many utilized in preclinical and clinical applications as well as immunotherapy.



## Growth Factors and Cytokines

Growth factors and cytokines are naturally occurring signalling molecules that are crucial players in complex cell-to-cell communication networks in higher organisms. These molecules carry regulatory messages between cells that practically determine the fate of all cellular processes. While cytokines are mostly associated with immune system housekeeping, growth factors regulate a wide range of processes during an organism's developmental and mature stages. Uncontrolled growth factor activation is often associated with oncogenesis.

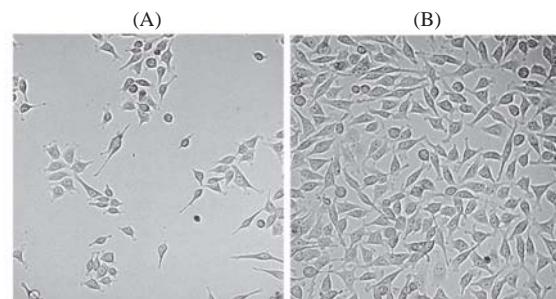
Considering their vital roles, it is not surprising that growth factors and cytokines are indispensable to many aspects of cell biology research and development. Traditional cell biology experiments use animal serum as a rich, but heterogeneous source of growth factors and nutrients required for normal cell metabolism. However, the use of animal serum is undesirable due to:

- Increased risk of viral, mycoplasma and prion contamination
- High cost and ethical concerns associated with serum collection
- Inaccurate interpretation of results due to non-standardized media that may also contain growth inhibitors

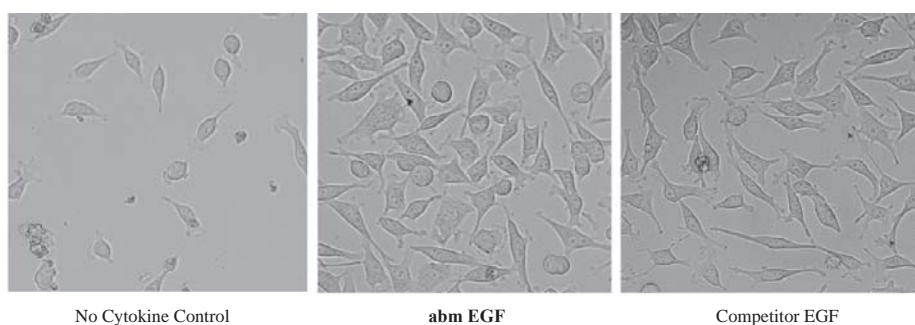
A switch from animal serum to recombinant growth factors is the logical choice for many types of research.

**abm's reliable, high quality products have the following features:**

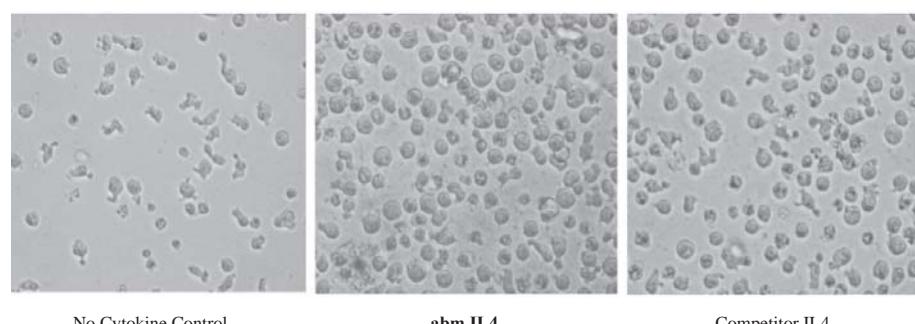
- **High Purity** - production under exacting conditions ensure consistent quality and  $\geq 95\%$  purity on every lot as assessed by SDS-PAGE
- **Minimal Endotoxin** - guaranteed to be below the acceptable limit of 1 EU/ug recombinant protein as tested by the standard Limulus Amebocyte Lysate (LAL) assay
- Assured Biological Activity with every lot
- Flexible Aliquot Sizes with our **custom-package services**
- **Option of an Animal-Free Version** for particularly sensitive applications



**Figure 1:** Increase in proliferation of Human Cervical Epithelial cells upon addition of Human Beta-Defensin 2 (DEFB4A):  
 (A) Negative Control (B) DEFB4A at the final concentration of 50 ng/ml.



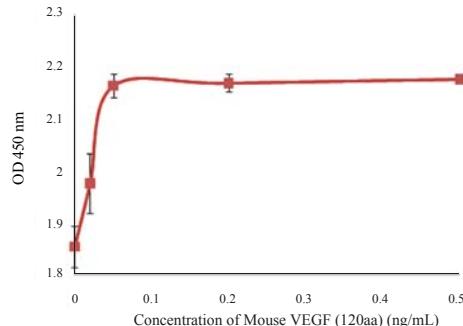
**Figure 2:** Increase in proliferation of Human Cervical Epithelial cells upon addition of abm's and competitor's Human EGF at a final concentration of 20 ng/ml.



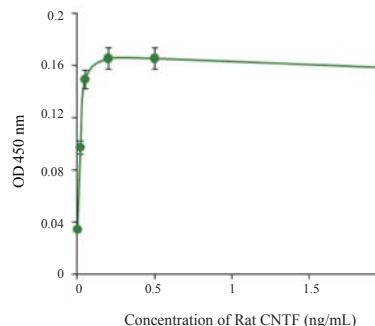
**Figure 3:** Increase in proliferation of Human Megakaryocytic Leukemia cells upon addition of abm's and competitor's Human IL4 at a final concentration of 10 ng/ml.

# Growth Factors and Cytokines

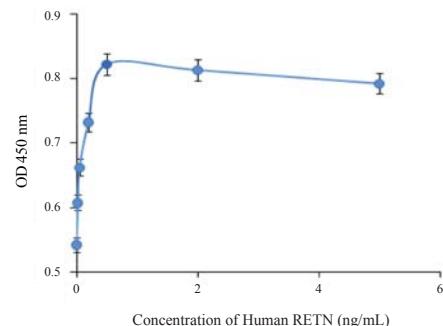
abm is proud to offer a wide-reperatoire of bioactive, recombinant human, mouse and rat growth factors and cytokines that are  $\geq 95\%$  pure, have  $<1.0$  EU of endotoxin/ $\mu\text{g}$  of protein and available in customizable aliquots.



**Figure 4:** abm's Recombinant Mouse VEGF (120aa) stimulates proliferation of mouse endothelial cells in a dose-dependent manner with an ED50  $<0.1$  ng/ml.



**Figure 5:** abm's Recombinant Rat CNTF stimulates proliferation of human megakaryocytic leukemia cells in a dose-dependent manner with an ED50  $<0.5$  ng/ml.



**Figure 6:** abm's Recombinant Human Resistin (RETN) that stimulates proliferation of human aortic smooth muscle cells in a dose-dependent manner with an ED50  $<1$  ng/ml.

## Recombinant Mouse Growth Factors and Cytokines

Product Name	Cat.No.	Source	Product Name	Cat.No.	Source	Product Name	Cat.No.	Source
Beta-Defensin 1 (DEFB1)	Z200265	E. coli	GRO gamma (CXCL3)	Z200415	E. coli	LIF	Z200485	CHO
Beta-Defensin 2 (DEFB2)	Z200285	E. coli	IFNG	Z200085	E. coli	LIX (CXCL5)	Z200555	E. coli
Beta-Defensin 3 (DEFB3)	Z200275	E. coli	IGF1	Z200625	E. coli	MCP-2 (CCL8)	Z200395	E. coli
CCL22	Z200315	E. coli	IL1A	Z200095	E. coli	MCP-5 (CCL12)	Z200385	E. coli
CCL25	Z200325	E. coli	IL1B	Z200105	E. coli	MEC (CCL28)	Z200335	E. coli
CXCL1	Z200345	E. coli	IL2	Z200135	E. coli	MIF	Z200295	E. coli
CXCL2	Z200355	E. coli	IL3	Z200145	E. coli	MIP-1 gamma (CCL9)	Z200375	E. coli
CXCL4 (PF4)	Z200305	E. coli	IL4	Z200165	E. coli	MIP-3 (CCL19)	Z200455	E. coli
CXCL12 (SDF-1 beta)	Z200205	E. coli	IL6	Z200175	E. coli	Noggin (NOG)	Z200235	E. coli
EGF	Z200025	E. coli	IL10	Z200465	CHO	SHH	Z200615	E. coli
Eotaxin (CCL11)	Z200035	E. coli	IL10	Z200115	E. coli	SR-PSOX (CXCL16)	Z200365	E. coli
Eotaxin-2 (CCL24)	Z200405	E. coli	IL11	Z200125	E. coli	Stem Cell Factor (KITLG)	Z200505	CHO
Exodus-2 (CCL21A)	Z200045	E. coli	IL12A	Z200445	CHO	Stem Cell Factor (KITLG)	Z200595	E. coli
FGF1	Z200005	E. coli	IL13	Z200245	E. coli	THPO	Z200535	E. coli
FGF2	Z200015	E. coli	IL17	Z200435	E. coli	TNF	Z200215	E. coli
FLT3 Ligand (FLT3LG)	Z200055	E. coli	IL18BP	Z200425	E. coli	VEGF (120aa)	Z200585	E. coli
G-CSF (CSF3)	Z200605	E. coli	IL25	Z200255	E. coli	VEGF (164aa)	Z200575	E. coli
GH1	Z200065	E. coli	IL33	Z200155	E. coli			
GM-CSF (CSF2)	Z200075	E. coli	KGF (FGF7)	Z200185	E. coli			

## Recombinant Rat Growth Factors and Cytokines

Product Name	Cat.No.	Source	Product Name	Cat.No.	Source	Product Name	Cat.No.	Source
CNTF	Z300035	E. coli	GRO gamma (CXCL3)	Z300135	E. coli	IL6	Z300085	E. coli
CXCL1	Z300105	E. coli	IFNG	Z300015	E. coli	IL10	Z300025	E. coli
CXCL2	Z300115	E. coli	IGF1	Z300055	E. coli	IL13	Z300095	E. coli
EGF	Z300045	E. coli	IL1B	Z300075	E. coli	IL17	Z300175	E. coli
Eotaxin (CCL11)	Z300145	E. coli	IL2	Z300195	E. coli	IL20	Z300165	E. coli
FGF2	Z300005	E. coli	IL3	Z300205	E. coli	LIX (CXCL5)	Z300125	E. coli
G-CSF (CSF3)	Z300185	E. coli	IL5	Z300155	E. coli	TNF	Z300065	E. coli

## Recombinant Human Growth Factors and Cytokines

Product Name	Cat.No.	Source	Product Name	Cat.No.	Source	Product Name	Cat.No.	Source
4-1BB Receptor (TNFRSF9)	Z101425	CHO	Cystatin C	Z102685	HEK293	GRO gamma (CXCL3)	Z101465	E. coli
4-1BB Receptor (TNFRSF9)	Z101085	E. coli	DAND5	Z102135	E. coli	HB-EGF (Heparin Binding EGF)	Z102155	E. coli
4-BBL (TNFSF9)	Z102255	E. coli	DHH	Z101695	E. coli	HCC-1 (CCL14)	Z100305	E. coli
Activin A (INHBA)	Z101665	E. coli	EGF	Z100135	E. coli	HCC-2 (CCL15)	Z100315	E. coli
Activin A (INHBA)	Z102635	HEK293	EGFL7	Z101535	Insect Cells	HGH	Z100335	
Adiponectin (Acrp30)	Z102595	E. coli	ENA-78 (CXCL5)	Z100165	E. coli	HGF	Z102775	HEK293
AIMP1	Z100155	E. coli	Eotaxin (CCL11)	Z100175	E. coli	HGH	Z102785	HEK293
AITRL (TNFSF18)	Z101725	E. coli	Eotaxin-2 (CCL24)	Z100185	E. coli	HSA	Z102795	HEK293
AREG	Z101875	E. coli	Eotaxin-3 (CCL26)	Z101575	E. coli	IFNA1 (IFN-alpha1)	Z102395	E. coli
Artemin (ARTN)	Z102355	E. coli	Epiregulin (EREG)	Z100995	E. coli	IFNA2A	Z101585	E. coli
BAFF/BLYS (TNFSF13B)	Z101135	CHO	EPO	Z101435	HEK293	IFNA2A	Z102805	HEK293
BAFF-R (TNFRSF13C)	Z100015	E. coli	FGF1	Z100005	E. coli	IFNA2B	Z102815	HEK293
BCA-1 (CXCL13)	Z100075	E. coli	FGF2	Z101455	E. coli	IFNA4	Z102405	E. coli
B-cell Activating Factor (TNFSF13B)	Z100965	E. coli	FGF3	Z102285	E. coli	IFNB1	Z101485	
B-cell Maturation Protein (TNFRSF17)	Z101445	E. coli	FGF4	Z102605	E. coli	IFNG	Z101175	
BDNF	Z100065	E. coli	FGF4	Z102715	HEK293	IFNG	Z100345	E. coli
Beta-Defensin 1 (DEFB1)	Z100025	E. coli	FGF6	Z101685	E. coli	IGF1	Z100385	E. coli
Beta-Defensin 2 (DEFB4A)	Z100035	E. coli	FGF7 (KGF)	Z102725	HEK293	IGF2	Z102345	E. coli
Beta-Defensin 3 (DEFB103A)	Z100045	E. coli	FGF8	Z101705	E. coli	IGF2BP2	Z101185	
Beta-Defensin 4 (DEFB104A)	Z100055	E. coli	FGF8	Z102735	HEK293	IGFBP3	Z100375	E. coli
Beta-NGF	Z101545	CHO	FGF9	Z101125	CHO	IGFBP5	Z102015	E. coli
Beta-NGF	Z102645	HEK293	FGF10	Z100205	E. coli	IGFBP7	Z102035	E. coli
BMP2	Z100085	E. coli	FGF16	Z102295	E. coli	IL10	Z101195	
BMP2	Z102665	HEK293	FGF17	Z102305	E. coli	IL1A	Z101225	
BMP-3 beta (GDF10)	Z100095	E. coli	FGF18	Z102315	E. coli	IL1A	Z100405	E. coli
BMP4	Z100105	E. coli	FGF19	Z102325	E. coli	IL1B	Z100395	E. coli
BMP4	Z102675	HEK293	FGF20	Z101715	E. coli	IL1B	Z102825	HEK293
BMP7	Z102655	HEK293	FGF21	Z101105	E. coli	IL1RN	Z100415	E. coli
Cardiotrophin-1 (CT-1)	Z102365	E. coli	FGF23	Z100985	E. coli	IL2	Z101235	
CCL1	Z101905	E. coli	FLT3 Ligand (FLT3LG)	Z100225	E. coli	IL2	Z100485	E. coli
CCL2	Z100625	E. coli	FLT3 Ligand (FLT3LG)	Z101145	CHO	IL2	Z102875	HEK293
CCL3	Z100675	E. coli	FLT3 Ligand (FLT3LG)	Z102745	HEK293	IL3	Z101295	
CCL4	Z100685	E. coli	Follistatin (FST)	Z101035	E. coli	IL3	Z100515	E. coli
CCL21	Z100195	E. coli	Fractalkine (CX3CL1)	Z101895	E. coli	IL3	Z102935	HEK293
CCL22	Z101015	E. coli	FSHB	Z100235	CHO	IL4	Z101305	
CCL25	Z101525	E. coli	Galectin-1 (LGALS1)	Z101845	E. coli	IL4	Z100545	E. coli
CD40 Ligand (CD40LG)	Z100125	E. coli	Galectin-3 (LGALS3)	Z101825	E. coli	IL4	Z102945	HEK293
Chemerin	Z102205	E. coli	GCP-2 (CXCL6)	Z101805	E. coli	IL6	Z101315	
CNTF	Z100955	E. coli	G-CSF (CSF3)	Z101155	CHO	IL6	Z100555	E. coli
CTACK (CCL27)	Z101885	E. coli	G-CSF (CSF3)	Z100245	E. coli	IL6	Z102955	HEK293
CTGF	Z102025	E. coli	G-CSF (CSF3)	Z102755	HEK293	IL7	Z101325	
CXCL1	Z100285	E. coli	GDF3	Z101735	E. coli	IL7	Z100975	E. coli
CXCL2	Z100295	E. coli	GDNF	Z101055	E. coli	IL7	Z102965	HEK293
CXCL4 (PF4)	Z101005	E. coli	GGF2	Z101655	E. coli	IL8 (72aa)	Z101605	E. coli
CXCL11	Z100585	E. coli	GH1	Z100265	E. coli	IL8 (77aa)	Z101615	E. coli
CXCL12 (SDF-1 $\alpha$ )	Z101635	E. coli	GM-CSF (CSF2)	Z101165	CHO	IL9	Z102475	E. coli
CXCL12 (SDF-1 $\beta$ )	Z101645	E. coli	GM-CSF (CSF2)	Z100275	E. coli	IL9	Z102975	HEK293
CXCL14 (BRAK)	Z102375	E. coli	GM-CSF (CSF2)	Z102765	HEK293	IL10	Z101195	
CXCL16	Z102385	E. coli	GMFB	Z101115	E. coli	IL10	Z101495	E. coli

# Growth Factors and Cytokines

## Recombinant Human Growth Factors and Cytokines

Product Name	Cat.No.	Source	Product Name	Cat.No.	Source	Product Name	Cat.No.	Source
IL10	Z102835	HEK293	M-CSF	Z102985	HEK293	SCF	Z103035	HEK293
IL11	Z100425	E. coli	MANF	Z102065	E. coli	SERPINF1	Z100765	E. coli
IL12	Z102845	HEK293	Maspin (SerpinB5)	Z102505	E. coli	SHH	Z101675	E. coli
IL13	Z100445	E. coli	MCP-2 (CCL8)	Z100635	E. coli	SOD1	Z100795	E. coli
IL15	Z101205	CHO	MCP-3 (CCL7)	Z101915	E. coli	Stem Cell Factor (KITLG)	Z101375	CHO
IL15	Z100455	E. coli	MCP-4 (CCL13)	Z100645	E. coli	Stem Cell Factor (KITLG)	Z100815	E. coli
IL16	Z101215	CHO	M-CSF (CSF1)	Z100655	E. coli	TARC (CCL17)	Z100835	E. coli
IL16	Z102415	E. coli	MEC (CCL28)	Z101025	E. coli	TFF1	Z101975	E. coli
IL17A	Z100465	E. coli	MIA	Z102045	E. coli	TFF2	Z101985	E. coli
IL17A	Z102855	HEK293	MIA2	Z102055	E. coli	TFF3	Z101995	E. coli
IL17C	Z102225	E. coli	Midkine (NEGF2)	Z102175	E. coli	TGF Beta-1	Z101555	HEK293
IL17D	Z102425	E. coli	MIF	Z100915	E. coli	TGF Beta-2	Z103055	HEK293
IL17F	Z102435	E. coli	MIG (CXCL9)	Z100665	E. coli	TGF Beta-3 (TGFB3)	Z102515	E. coli
IL17F	Z102865	HEK293	MIP-1 beta (CCL4L1)	Z102105	E. coli	TGF Beta-3 (TGFB3)	Z103065	HEK293
IL18	Z100475	E. coli	MIP-3 (CCL23)	Z100695	E. coli	TGFA	Z101935	E. coli
IL18BP	Z101045	HEK293	MIP-3 alpha (CCL20)	Z100705	E. coli	THBS1	Z101395	Insect Cells
IL19	Z102445	E. coli	MIP-3 beta (CCL19)	Z101945	E. coli	THPO	Z101515	E. coli
IL20	Z101075	E. coli	MIP-4 (CCL18)	Z100715	E. coli	Thymosin-Beta 4 (TMSB4X)	Z102005	E. coli
IL21	Z101245	CHO	MMP2	Z101815	E. coli	TNF	Z101385	CHO
IL21	Z100495	E. coli	MSTN	Z100255	E. coli	TNF	Z100855	E. coli
IL22	Z101255	CHO	NAP-2 (PPBP) (CXCL7)	Z100725	E. coli	TNFA	Z103075	HEK293
IL22	Z100945	E. coli	Neuritin	Z102185	E. coli	TNFRSF10B	Z102245	E. coli
IL23	Z102885	HEK293	Nodal	Z102485	E. coli	TNFRSF1A	Z102235	E. coli
IL24	Z101265	CHO	Noggin (NOG)	Z101355	CHO	TNFRSF1B	Z101745	E. coli
IL27	Z101275	CHO	Noggin (NOG)	Z100925	E. coli	TPO	Z103085	HEK293
IL27	Z102895	HEK293	Noggin (NOG)	Z102995	HEK293	TRAIL (TNFSF10)	Z101755	E. coli
IL28A	Z102455	E. coli	NOV	Z102075	E. coli	TSLP	Z101095	E. coli
IL28A	Z102905	HEK293	NRG1	Z101625	E. coli	TWEAK (TNFSF12)	Z102275	E. coli
IL28B	Z101285	CHO	NRG4	Z100905	E. coli	TWEAK Receptor (TNFRSF12A)	Z102525	E. coli
IL28B	Z102915	HEK293	OPG (TNFRSF11B)	Z101775	E. coli	Uteroglobin (SCGB1A1)	Z101965	E. coli
IL29	Z102925	HEK293	OSM	Z101365	CHO	VEGF121	Z103095	HEK293
IL29 (IFNL1)	Z100505	E. coli	OSM	Z100755	E. coli	VEGF (121aa)	Z101405	CHO
IL31	Z100525	E. coli	OSM	Z103005	HEK293	VEGF (121aa)	Z102115	E. coli
IL33	Z100535	E. coli	PDGFA	Z100365	E. coli	VEGF165	Z103105	HEK293
IL36A	Z101865	E. coli	PDGFA	Z103015	HEK293	VEGF (165aa)	Z101415	CHO
IL36B	Z102465	E. coli	PDGFB	Z100355	E. coli	VEGF (165aa)	Z100895	E. coli
IL36G	Z102215	E. coli	PDGFC	Z101785	E. coli	VEGFB	Z102535	E. coli
IL37/IL23	Z102085	E. coli	Persephin (PSPN)	Z102495	E. coli	WISP2	Z101925	E. coli
Insulin (INS)	Z101065	Yeast Cells	PIGF	Z102615	E. coli	WISP3	Z102545	E. coli
IP-10 (CXCL10)	Z100575	E. coli	Pro-IGF-II	Z103025	HEK293	WNT1	Z102125	E. coli
KGF (FGF7)	Z101335	CHO	Prolactin (PRL)	Z102145	E. coli			
KGF (FGF7)	Z100595	E. coli	PTH	Z100775	E. coli			
LEC (CCL16)	Z100325	E. coli	RANKL (TNFSF11)	Z102265	E. coli			
Leptin (LEP)	Z101855	E. coli	RANTES (CCL5)	Z100785	E. coli			
LIF	Z101345	CHO	Resistin (RETN)	Z100805	E. coli			
LIF	Z100605	E. coli	Resistin-like beta (RETNLB)	Z101955	E. coli			
LTA	Z101565	CHO	S100A13	Z102195	E. coli			
LTA	Z100865	E. coli	S100A4	Z101505	E. coli			
Lymphotactin (XCL1)	Z100615	E. coli	sCD23 (FCER2)	Z101835	E. coli			

## Active Kinases Product List

unit size :10 µg

Cat No	Active Kinases	Cat No	Active Kinases	Cat No	Active Kinases
Z500001	Recombinant Human ABL1 (N-His tag)	Z500051	Recombinant Human CAMK2 alpha (N-GST tag)	Z500106	Recombinant Human DMPK (N-GST tag)
Z500002	Recombinant Human ABL2 (N-His tag)	Z500052	Recombinant Human CAMK2 beta (N-His tag)	Z500107	Recombinant Human DRAK1 (STK17A) (N-GST tag)
Z500003	Recombinant Human ACK (N-GST tag)	Z500053	Recombinant Human CAMK2 delta (N-GST tag)	Z500108	Recombinant Human DRAK2 (STK17B) (N-GST tag)
Z500004	Recombinant Human AKT1 (N-GST tag)	Z500054	Recombinant Human CAMK2 gamma (N-GST tag)	Z500109	Recombinant Human DYRK1B (N-GST tag)
Z500005	Recombinant Human AKT2 (N-GST tag)	Z500055	Recombinant Human CAMK2beta (N-GST tag)	Z500110	Recombinant Human DYRK2 (N-GST tag)
Z500006	Recombinant Human AKT2 (N-His tag)	Z500056	Recombinant Human CAMK2gamma (N-GST tag)	Z500111	Recombinant Human DYRK3 (N-GST tag)
Z500007	Recombinant Human AKT3 (N-GST tag)	Z500057	Recombinant Human CAMK4 (N-GST tag)	Z500112	Recombinant Human DYRK4 (N-GST tag)
Z500008	Recombinant Human ALK (N-GST tag)	Z500058	Recombinant Human CAMKK1 (N-GST tag)	Z500113	Recombinant Human EEF2K (N-GST tag)
Z500009	Recombinant Human ALK1 (N-GST tag)	Z500059	Recombinant Human CAMKK2 (N-GST tag)	Z500114	Recombinant Human EGFR (N-GST tag)
Z500010	Recombinant Human ALK2 (N-GST tag)	Z500060	Recombinant Human CASK (N-GST tag)	Z500115	Recombinant Human EIF2AK1 (HRI) (N-GST tag)
Z500011	Recombinant Human ALK3 (BMPR1A) (N-GST tag)	Z500061	Recombinant Human CDC42BPG (DMPK2) (N-GST tag)	Z500116	Recombinant Human EIF2AK2 (N-GST tag)
Z500012	Recombinant Human ALK4 (N-GST tag)	Z500062	Recombinant Human CDC7/DBF4 (N-GST tag)	Z500117	Recombinant Human EIF2AK3 (N-GST tag)
Z500013	Recombinant Human ALK6 (BMPR1B) (N-GST tag)	Z500063	Recombinant Human CDK1/CyclinA1 (N-GST tag)	Z500118	Recombinant Human EIF2AK4 (GCN2) (N-GST tag)
Z500014	Recombinant Human AMPK (A1/B1/G1) (C-His tag)	Z500064	Recombinant Human CDK1/CyclinA2 (N-GST tag)	Z500119	Recombinant Human EPHA1 (569-end) (N-GST tag)
Z500015	Recombinant Human AMPK (A1/B1/G2) (N-GST/C-His tag)	Z500065	Recombinant Human CDK1/CyclinB1 (N-GST tag)	Z500120	Recombinant Human EPHA1 (613-892aa) (N-GST tag)
Z500016	Recombinant Human AMPK (A1/B1/G2) (C-His tag)	Z500066	Recombinant Human CDK2/CyclinA1 (N-GST tag)	Z500121	Recombinant Human EPHA2 (N-GST tag)
Z500017	Recombinant Human AMPK (A1/B1/G3) (N-GST/C-His tag)	Z500067	Recombinant Human CDK2/CyclinA2 (N-GST tag)	Z500122	Recombinant Human EPHA3 (N-GST tag)
Z500018	Recombinant Human AMPK (A1/B1/G3) (C-His tag)	Z500068	Recombinant Human CDK2/CyclinE1 (N-GST tag)	Z500123	Recombinant Human EPHA4 (610-887aa) (N-GST tag)
Z500019	Recombinant Human AMPK (A1/B2/G1) (N-GST/C-His tag)	Z500069	Recombinant Human CDK2/CyclinO (N-GST tag)	Z500124	Recombinant Human EPHA4 (570-end) (N-GST tag)
Z500020	Recombinant Human AMPK (A1/B2/G1) (C-His tag)	Z500070	Recombinant Human CDK3/CyclinE1 (N-GST tag)	Z500125	Recombinant Human EPHA6 (N-GST tag)
Z500021	Recombinant Human AMPK (A1/B2/G2) (N-GST/C-His tag)	Z500071	Recombinant Human CDK4/CyclinD1 (N-GST tag)	Z500126	Recombinant Human EPHB2 (570-end) (N-GST tag)
Z500022	Recombinant Human AMPK (A1/B2/G3) (N-GST/C-His tag)	Z500072	Recombinant Human CDK4/CyclinD3 (N-GST tag)	Z500127	Recombinant Human EPHB2 (611-893aa) (N-GST tag)
Z500023	Recombinant Human AMPK (A2/B1/G1) (C-His tag)	Z500073	Recombinant Human CDK5/p25 (N-GST tag)	Z500128	Recombinant Human EPHB3 (N-GST tag)
Z500024	Recombinant Human AMPK (A2/B1/G2) (N-GST/C-His tag)	Z500074	Recombinant Human CDK5/p35 (N-GST tag)	Z500129	Recombinant Human EPHB4 (N-GST tag)
Z500025	Recombinant Human AMPK (A2/B1/G3) (N-GST/C-His tag)	Z500075	Recombinant Human CDK6/CyclinD1 (N GST/His tag)	Z500130	Recombinant Human EPHB4 (N-His tag)
Z500026	Recombinant Human AMPK (A2/B2/G1) (N-GST/C-His tag)	Z500076	Recombinant Human CDK6/CyclinD3 (N-His tag)	Z500131	Recombinant Human ERK1 (N-GST tag)
Z500027	Recombinant Human AMPK (A2/B2/G1) (C-His tag)	Z500077	Recombinant Human CDK7/CyclinH1/MNAT1 (N-His tag)	Z500132	Recombinant Human ERK1
Z500028	Recombinant Human AMPK (A2/B2/G2) (N-GST/C-His tag)	Z500078	Recombinant Human CDK9/CyclinK (N-GST tag)	Z500133	Recombinant Human ERK2 (N-GST tag)
Z500029	Recombinant Human AMPK (A2/B2/G2) (C-His tag)	Z500079	Recombinant Human CDK9/CyclinT2 (N-GST tag)	Z500134	Recombinant Human ERK5 (N-GST tag)
Z500030	Recombinant Human AMPK (A2/B2/G3) (N/C His tag)	Z500080	Recombinant Human CHK1 (N-GST tag)	Z500135	Recombinant Human ERN1 (IRE1) (N-GST tag)
Z500031	Recombinant Human ANKK1 (SGK288) (N-GST tag)	Z500081	Recombinant Human CHK1 (N-His tag)	Z500136	Recombinant Human ERN2 (IRE2) (N-GST tag)
Z500032	Recombinant Human ASK1 (N-GST tag)	Z500082	Recombinant Human CHK2 (N-GST tag)	Z500137	Recombinant Human FAK (N-GST tag)
Z500033	Recombinant Human AURORA A (N-GST tag)	Z500083	Recombinant Human CK1 alpha 1 (N-GST tag)	Z500138	Recombinant Human FAK (N-His tag)
Z500034	Recombinant Human AURORA B (N-GST tag)	Z500084	Recombinant Human CK1 alpha 1L (N-GST tag)	Z500139	Recombinant Human FASTK (N-GST tag)
Z500035	Recombinant Human AURORA C (N-GST tag)	Z500085	Recombinant Human CK1 delta (N-GST tag)	Z500140	Recombinant Human FES (N-GST tag)
Z500036	Recombinant Human AXL (N-His tag)	Z500086	Recombinant Human CK1 epsilon (N-GST tag)	Z500141	Recombinant Human FGFR1 (FLT2) (N-GST tag)
Z500037	Recombinant Human BLK (N-GST tag)	Z500087	Recombinant Human CK1 gamma 1 (N-GST tag)	Z500142	Recombinant Human FGFR2 (N-GST tag)
Z500038	Recombinant Human BMPR2 (N-His tag)	Z500088	Recombinant Human CK1 gamma 2 (N-GST tag)	Z500143	Recombinant Human FGFR3 (N-GST tag)
Z500039	Recombinant Human BMX (N-GST tag)	Z500089	Recombinant Human CK1 gamma 3 (N-GST tag)	Z500144	Recombinant Human FGFR4 (N-GST tag)
Z500040	Recombinant Human BRAF (N-GST tag)	Z500090	Recombinant Human CK2 alpha 1 (N-GST tag)	Z500145	Recombinant Human FGR (N-GST tag)
Z500041	Recombinant Human BRAF (N-GST tag)	Z500091	Recombinant Human CK2 alpha 2 (N-GST tag)	Z500146	Recombinant Human FLT1 (N-GST tag)
Z500042	Recombinant Human BRK (N-GST tag)	Z500092	Recombinant Human CLK1 (N-GST tag)	Z500147	Recombinant Human FLT3 (N-GST tag)
Z500043	Recombinant Human BRSK2 (N-GST tag)	Z500093	Recombinant Human CLK2 (N-GST tag)	Z500148	Recombinant Human FLT4 (N-GST tag)
Z500044	Recombinant Human BTK (N-His tag)	Z500094	Recombinant Human CLK3 (N-GST tag)	Z500149	Recombinant Human FMS (N-GST tag)
Z500045	Recombinant Human BUB1B (N-GST tag)	Z500095	Recombinant Human CLK4 (N-GST tag)	Z500150	Recombinant Human FRK (N-GST tag)
Z500046	Recombinant Human c-KIT (N-GST tag)	Z500096	Recombinant Human COT (N-GST tag)	Z500151	Recombinant Human FYN A (N-GST tag)
Z500047	Recombinant Human c-MER (N-GST tag)	Z500097	Recombinant Human CSK (N-GST tag)	Z500152	Recombinant Human GCK (N-GST tag)
Z500048	Recombinant Human CAMK1 delta (N-GST tag)	Z500098	Recombinant Human CSK	Z500153	Recombinant Human GLK (N-GST tag)
Z500049	Recombinant Human CAMK1 gamma (N-GST tag)	Z500099	Recombinant Human DAPK1 (N-GST tag)	Z500154	Recombinant Human GRK1 (N-GST tag)
Z500050	Recombinant Human CAMK1 gamma (1-330aa) (N-GST tag)	Z500100	Recombinant Human DAPK2 (N-GST tag)	Z500155	Recombinant Human GRK2 (N-GST tag)
		Z500101	Recombinant Human DAPK3 (N-GST tag)	Z500156	Recombinant Human GRK3 (N-GST tag)
		Z500102	Recombinant Human DCAMKL1 (N-GST tag)	Z500157	Recombinant Human GRK5 (N-GST tag)
		Z500103	Recombinant Human DCAMKL2 (N-GST tag)	Z500158	Recombinant Human GRK6 (N-GST tag)
		Z500104	Recombinant Human DDR1 (N-GST tag)	Z500159	Recombinant Human GRK7 (N-GST tag)
		Z500105	Recombinant Human DDR2 (N-GST tag)	Z500160	Recombinant Human GSK3 alpha (N-GST tag)
				Z500161	Recombinant Human GSK3 beta (N-GST tag)

## Active Kinases Product List

unit size :10 µg

Cat No	Active Kinases	Cat No	Active Kinases	Cat No	Active Kinases
Z500162	Recombinant Human GSK3 beta (N-His tag)	Z500218	Recombinant Human MEKK1 (N-GST tag)	Z500274	Recombinant Human PCTK1 (CDK16)/CyclinY (N-GST tag)
Z500163	Recombinant Human Haspin (GSG2) (N-GST tag)	Z500219	Recombinant Human MEKK2 (N-GST tag)	Z500275	Recombinant Human PCTK2 (CDK17)/CyclinY (N-GST tag)
Z500164	Recombinant Human HCK (N-GST tag)	Z500220	Recombinant Human MEKK3 (N-GST tag)	Z500276	Recombinant Human PCTK3 (CDK18)/CyclinY (N-GST tag)
Z500165	Recombinant Human HER2 (N-GST tag)	Z500221	Recombinant Human MEKK6 (N-GST tag)	Z500277	Recombinant Human PDGFR alpha (N-GST tag)
Z500166	Recombinant Human HER4 (N-GST tag)	Z500222	Recombinant Human MELK (1-340aa) (N-GST tag)	Z500278	Recombinant Human PDGFR beta (N-GST tag)
Z500167	Recombinant Human HGK (N-GST tag)	Z500223	Recombinant Human MELK (1-550aa) (N-GST tag)	Z500279	Recombinant Human PDHK1 (N-GST tag)
Z500168	Recombinant Human HIPK1 (N-GST tag)	Z500224	Recombinant Human MET (N-GST tag)	Z500280	Recombinant Human PDHK2 (N-GST tag)
Z500169	Recombinant Human HIPK3 (N-His tag)	Z500225	Recombinant Human MINK1 (N-GST tag)	Z500281	Recombinant Human PDHK3 (N-GST tag)
Z500170	Recombinant Human HIPK4 (N-GST tag)	Z500226	Recombinant Human MLCK (N-GST tag)	Z500282	Recombinant Human PDHK4 (N-GST tag)
Z500171	Recombinant Human HIPK4 (N-His tag)	Z500227	Recombinant Human MLK1 (N-GST tag)	Z500283	Recombinant Human PDK1 (N-His tag)
Z500172	Recombinant Human HPK1 (N-GST tag)	Z500228	Recombinant Human MLK2 (N-GST tag)	Z500284	Recombinant Human PEAK1 (N-GST tag)
Z500173	Recombinant Human HUNK (N-GST tag)	Z500229	Recombinant Human MLK3 (N-GST tag)	Z500285	Recombinant Human PFTK1 (CDK14)/CyclinY (N-GST tag)
Z500174	Recombinant Human ICK (N-GST tag)	Z500230	Recombinant Human MLK4 (N-GST tag)	Z500286	Recombinant Human PHKG1 (N-GST tag)
Z500175	Recombinant Human IGF1R (N-His tag)	Z500231	Recombinant Human MNK1 (N-GST tag)	Z500287	Recombinant Human PHKG2 (N-GST tag)
Z500176	Recombinant Human IKK alpha (N-GST tag)	Z500232	Recombinant Human MNK2 (N-GST tag)	Z500288	Recombinant Human PI3K (p110 alpha/p55 gamma) (N-His tag)
Z500177	Recombinant Human IKK beta (N-GST tag)	Z500233	Recombinant Human MRCK alpha (N-GST tag)	Z500289	Recombinant Human PI3K (p110 alpha/p85 alpha) (N-His tag)
Z500178	Recombinant Human IKK epsilon (N-GST tag)	Z500234	Recombinant Human MRCK beta (N-GST tag)	Z500290	Recombinant Human PI3K (p110 beta/p85 alpha) (N-His tag)
Z500179	Recombinant Human InsR (N-GST tag)	Z500235	Recombinant Human MSK1 (N-GST tag)	Z500291	Recombinant Human PI3K (p110 beta/p85 beta) (N-His tag)
Z500180	Recombinant Human IRAK2 (N-GST tag)	Z500236	Recombinant Human MSSK1 (N-GST tag)	Z500292	Recombinant Human PI3K (p110 delta/p85 alpha) (N-His tag)
Z500181	Recombinant Human IRAK4 (N-GST tag)	Z500237	Recombinant Human MST1 (N-GST tag)	Z500293	Recombinant Human PI3K (p120 gamma) (N-His tag)
Z500182	Recombinant Human IRR (N-GST tag)	Z500238	Recombinant Human MST3 (N-GST tag)	Z500294	Recombinant Human PI4K2A (N-GST tag)
Z500183	Recombinant Human ITK (N-GST tag)	Z500239	Recombinant Human MST4 (N-GST tag)	Z500295	Recombinant Human PI4K2B (N-GST tag)
Z500184	Recombinant Human ITK (352-end) (N-GST tag)	Z500240	Recombinant Human MUSK (N-GST tag)	Z500296	Recombinant Human PI4KB (N-GST tag)
Z500185	Recombinant Human JAK1 (N-GST tag)	Z500241	Recombinant Human MYLK2 (N-His tag)	Z500297	Recombinant Human PIK3C2A (N-GST tag)
Z500186	Recombinant Human JAK2 (N-GST tag)	Z500242	Recombinant Human MYLK3 (N-GST tag)	Z500298	Recombinant Human PIK3C2G (N-GST tag)
Z500187	Recombinant Human JAK3 (N-GST tag)	Z500243	Recombinant Human MYLK4 (N-GST tag)	Z500299	Recombinant Human PIK3C3 (Vps34) (N-GST tag)
Z500188	Recombinant Human JNK2 (N-GST tag)	Z500244	Recombinant Human MYO3 beta (N-GST tag)	Z500300	Recombinant Human PIM1 (N-GST tag)
Z500189	Recombinant Human JNK3 (N-GST tag)	Z500245	Recombinant Human MYO3alpha (N-GST tag)	Z500301	Recombinant Human PIM2 (N-GST tag)
Z500190	Recombinant Human KDR (N-GST tag)	Z500246	Recombinant Human NDR (N-GST tag)	Z500302	Recombinant Human PIM3 (N-GST tag)
Z500191	Recombinant Human KHS1 (N-GST tag)	Z500247	Recombinant Human NDR2 (N-GST tag)	Z500303	Recombinant Human PIP4K2A (N-GST tag)
Z500192	Recombinant Human KSR1 (431-end) (N-GST tag)	Z500248	Recombinant Human NEK11 (N-GST tag)	Z500304	Recombinant Human PIP5K1A (N-GST tag)
Z500193	Recombinant Human KSR1 (335-end) (N-GST tag)	Z500249	Recombinant Human NEK2 (N-GST tag)	Z500305	Recombinant Human PIP5K1B (N-GST tag)
Z500194	Recombinant Human KSR2 (N-GST tag)	Z500250	Recombinant Human NEK3 (N-GST tag)	Z500306	Recombinant Human PIP5K1C (N-GST tag)
Z500195	Recombinant Human LATS1 (N-GST tag)	Z500251	Recombinant Human NEK4 (N-GST tag)	Z500307	Recombinant Human PKAc alpha (N-GST tag)
Z500196	Recombinant Human LATS2 (N-GST tag)	Z500252	Recombinant Human NEK5 (N-GST tag)	Z500308	Recombinant Human PKAc beta (N-GST tag)
Z500197	Recombinant Human LCK (N-GST tag)	Z500253	Recombinant Human NEK6 (N-GST tag)	Z500309	Recombinant Human PKAc gamma (N-GST tag)
Z500198	Recombinant Human LIMK1 (N-GST tag)	Z500254	Recombinant Human NEK7 (N-GST tag)	Z500310	Recombinant Human PKC alpha (N-GST tag)
Z500199	Recombinant Human LOK (N-GST tag)	Z500255	Recombinant Human NEK8 (N-GST tag)	Z500311	Recombinant Human PKC beta I (N-GST tag)
Z500200	Recombinant Human LRRK2 (N-GST tag)	Z500256	Recombinant Human NEK9 (N-GST tag)	Z500312	Recombinant Human PKC beta II (N-GST tag)
Z500201	Recombinant Human LTK (N-GST tag)	Z500257	Recombinant Human NIK (N-GST tag)	Z500313	Recombinant Human PKC delta (N-GST tag)
Z500202	Recombinant Human LYN A (N-GST tag)	Z500258	Recombinant Human NIM1 (N-GST tag)	Z500314	Recombinant Human PKC epsilon (N-GST tag)
Z500203	Recombinant Human LYN B (N-GST tag)	Z500259	Recombinant Human NLK (N-GST tag)	Z500315	Recombinant Human PKC eta (N-GST tag)
Z500204	Recombinant Human MAK (N-GST tag)	Z500260	Recombinant Human NUAK1 (N-GST tag)	Z500316	Recombinant Human PKC gamma (N-GST tag)
Z500205	Recombinant Human MAPKAPK2 (N-GST tag)	Z500261	Recombinant Human NUAK2 (N-GST tag)	Z500317	Recombinant Human PKC iota (N-GST tag)
Z500206	Recombinant Human MAPKAPK2 (N-His tag)	Z500262	Recombinant Human p38 alpha (N-GST tag)	Z500318	Recombinant Human PKC mu (N-GST tag)
Z500207	Recombinant Human MAPKAPK3 (N-GST tag)	Z500263	Recombinant Human p38 beta (N-GST tag)	Z500319	Recombinant Human PKC nu (N-GST tag)
Z500208	Recombinant Human MAPKAPK5 (N-GST tag)	Z500264	Recombinant Human p38 delta (N-GST tag)	Z500320	Recombinant Human PKC theta (N-GST tag)
Z500209	Recombinant Human MARK1 (N-GST tag)	Z500265	Recombinant Human p38 gamma (N-GST tag)	Z500321	Recombinant Human PKC zeta (N-GST tag)
Z500210	Recombinant Human MARK2 (N-GST tag)	Z500266	Recombinant Human p70S6K (N-His tag)	Z500322	Recombinant Human PKD2 (N-GST tag)
Z500211	Recombinant Human MARK3 (N-GST tag)	Z500267	Recombinant Human p70S6Kb (N-GST tag)	Z500323	Recombinant Human PKN1/PRK1 (N-GST tag)
Z500212	Recombinant Human MARK4 (N-GST tag)	Z500268	Recombinant Human PAK1 (N-GST tag)		
Z500213	Recombinant Human MATK (CTK) (N-GST tag)	Z500269	Recombinant Human PAK1/CDC42 (N-GST tag)		
Z500214	Recombinant Human MEK1 (N-GST tag)	Z500270	Recombinant Human PAK4 (N-GST tag)		
Z500215	Recombinant Human MEK2 (N-GST tag)	Z500271	Recombinant Human PAK6 (N-GST tag)		
Z500216	Recombinant Human MEK5 (N-GST tag)	Z500272	Recombinant Human PAK7 (N-GST tag)		
Z500217	Recombinant Human MEK6 (N-GST tag)	Z500273	Recombinant Human PASK (N-GST tag)		

## Active Kinases Product List

unit size :10 µg

Cat No	Active Kinases	Cat No	Active Kinases	Cat No	Active Kinases
Z500324	Recombinant Human PKN2/PRK2 (N-GST tag)	Z500364	Recombinant Human SPHK2 (N-GST tag)	Z500404	Recombinant Human ULK3 (N-His tag)
Z500325	Recombinant Human PKN3/PRK3 (N-GST tag)	Z500365	Recombinant Human SRC (N-GST tag)	Z500405	Recombinant Human VRK1 (N-GST tag)
Z500326	Recombinant Human PLK1 (N-His tag)	Z500366	Recombinant Human SRMS (N-GST tag)	Z500406	Recombinant Human VRK2 (N-GST tag)
Z500327	Recombinant Human PLK2 (N-GST tag)	Z500367	Recombinant Human SRPK1 (N-GST tag)	Z500407	Recombinant Human WNK1 (N-GST tag)
Z500328	Recombinant Human PLK3 (N-GST tag)	Z500368	Recombinant Human SRPK2 (N-GST tag)	Z500408	Recombinant Human WNK2 (N-GST tag)
Z500329	Recombinant Human PLK4 (N-GST tag)	Z500369	Recombinant Human STK19 (N-GST tag)	Z500409	Recombinant Human YES1 (N-GST tag)
Z500330	Recombinant Human PRKG1 (N-GST tag)	Z500370	Recombinant Human STK21 (CIT) (N-GST tag)	Z500410	Recombinant Human YSK4 (MAP3K19) (N-GST tag)
Z500331	Recombinant Human PRKG1 (324-end) (N-GST tag)	Z500371	Recombinant Human STK3 (N-GST tag)	Z500411	Recombinant Human ZAK (N-GST tag)
Z500332	Recombinant Human PRKG2 (N-GST tag)	Z500372	Recombinant Human STK32B (YANK2) (N-GST tag)	Z500412	Recombinant Human ZAP70 (N-GST tag)
Z500333	Recombinant Human PRKX (N-GST tag)	Z500373	Recombinant Human STK32C (YANK3) (N-GST tag)	Z600001	Recombinant Mouse ABL1 (N-His tag)
Z500334	Recombinant Human PYK2 (N-His tag)	Z500374	Recombinant Human STK33 (N-GST tag)	Z600002	Recombinant Mouse AURORA A (N-GST tag)
Z500335	Recombinant Human QIK (N-GST tag)	Z500375	Recombinant Human STK36 (N-GST tag)	Z600004	Recombinant Mouse BRSK1 (N-GST tag)
Z500336	Recombinant Human RAF1 (EE) (N-GST tag)	Z500376	Recombinant Human STK39 (STLK3) (N-His tag)	Z600007	Recombinant Mouse CAMK1 (N-GST tag)
Z500337	Recombinant Human RET (N-GST tag)	Z500377	Recombinant Human SYK (N-GST tag)	Z600006	Recombinant Mouse CAMK1 beta (N-GST tag)
Z500338	Recombinant Human RIPK1 (N-GST tag)	Z500378	Recombinant Human TAK1-TAB1 (N-GST tag)	Z600009	Recombinant Mouse EPHA1 (N-GST tag)
Z500339	Recombinant Human RIPK2 (N-GST tag)	Z500379	Recombinant Human TAOK1 (N-GST tag)	Z600010	Recombinant Mouse EPHA7 (N-GST tag)
Z500340	Recombinant Human RIPK3 (N-GST tag)	Z500380	Recombinant Human TAOK2 (N-GST tag)	Z600011	Recombinant Mouse EPHB1 (N-GST tag)
Z500341	Recombinant Human RIPK5 (N-GST tag)	Z500381	Recombinant Human TAOK3 (N-GST tag)	Z600012	Recombinant Mouse FER (N-GST tag)
Z500342	Recombinant Human ROCK1 (N-GST tag)	Z500382	Recombinant Human TBK1 (N-GST tag)	Z600013	Recombinant Mouse HIPK2 (N-GST tag)
Z500343	Recombinant Human ROCK2 (N-GST tag)	Z500383	Recombinant Human TEC (N-GST tag)	Z600014	Recombinant Mouse JNK1 (N-GST tag)
Z500344	Recombinant Human ROCK2 (N-His tag)	Z500384	Recombinant Human TESK2 (N-GST tag)	Z600015	Recombinant Mouse MEK1 (EE) (N-GST tag)
Z500345	Recombinant Human RON (N-GST tag)	Z500385	Recombinant Human TGFBR1 (ALK5) (N-GST tag)	Z600017	Recombinant Mouse MSK2 (N-GST tag)
Z500346	Recombinant Human ROR1 (N-GST tag)	Z500386	Recombinant Human TGFBR2 (N-GST tag)	Z600018	Recombinant Mouse NEK1 (N-GST tag)
Z500347	Recombinant Human ROR2 (N-GST tag)	Z500387	Recombinant Human TIE2 (N-GST tag)	Z600019	Recombinant Mouse PAK3 (N-GST tag)
Z500348	Recombinant Human ROS1 (G2032R) (N-GST tag)	Z500388	Recombinant Human TLK1 (N-GST tag)	Z600020	Recombinant Mouse PDGFR alpha (N-GST tag)
Z500349	Recombinant Human ROS1 (N-GST tag)	Z500389	Recombinant Human TLK2 (N-GST tag)	Z600021	Recombinant Mouse PIM3 (N-GST tag)
Z500350	Recombinant Human RSK1 (N-GST tag)	Z500390	Recombinant Human TNIK (N-GST tag)	Z600025	Recombinant Mouse TGFBR1 (ALK5) (N-GST tag)
Z500351	Recombinant Human RSK2 (N-GST tag)	Z500391	Recombinant Human TOPK (N-GST tag)	Z600026	Recombinant Mouse TGFBR2 (N-GST tag)
Z500352	Recombinant Human RSK3 (N-GST tag)	Z500392	Recombinant Human TRKA (N-GST tag)	Z600027	Recombinant Mouse TTBK2 (N-GST tag)
Z500353	Recombinant Human RSK4 (N-GST tag)	Z500393	Recombinant Human TRKB (N-GST tag)	Z600029	Recombinant Mouse WNK4 (N-GST tag)
Z500354	Recombinant Human SBK1 (N-GST tag)	Z500394	Recombinant Human TRKC (N-His tag)	Z600003	Recombinant Rat BMX (N-GST tag)
Z500355	Recombinant Human SGK1 (N-GST tag)	Z500395	Recombinant Human TSSK1B (N-GST tag)	Z600005	Recombinant Rat BTK (N-His tag)
Z500356	Recombinant Human SGK2 (N-GST tag)	Z500396	Recombinant Human TSSK2 (N-GST tag)	Z600008	Recombinant Rat CAMKK1 (N-GST tag)
Z500357	Recombinant Human SGK3 (N-GST tag)	Z500397	Recombinant Human TTBK1 (N-GST tag)	Z600016	Recombinant Rat MET (N-GST tag)
Z500358	Recombinant Human SIK (N-GST tag)	Z500398	Recombinant Human TTK (N-GST tag)	Z600024	Recombinant Rat TEC (N-GST tag)
Z500359	Recombinant Human SIK3 (N-GST tag)	Z500399	Recombinant Human TXK (N-GST tag)	Z600028	Recombinant Rat TXK (N-GST tag)
Z500360	Recombinant Human SLK (N-GST tag)	Z500400	Recombinant Human TYK2 (JTK1) (N-GST tag)	Z600023	Recombinant Rous Sarcoma Virus SRC (N-GST tag)
Z500361	Recombinant Human SNRK (N-GST tag)	Z500401	Recombinant Human TYRO3 (N-GST tag)	Z600022	Recombinant Xenopus PKC alpha (N-GST tag)
Z500362	Recombinant Human SOK1 (N-GST tag)	Z500402	Recombinant Human ULK1 (N-GST tag)		
Z500363	Recombinant Human SPHK1 (N-GST tag)	Z500403	Recombinant Human ULK2 (N-GST tag)		

## Active Kinases

- **High Purity** - abm's active kinases are produced to ensure consistent quality and up to 95% purity, as assessed by SDS-PAGE, on every lot.
- **Assured Biological Activity** - All of abm's kinases are assayed to ensure reliable and reproducible functionality (specific activity is reported for each lot).
- **A Wide Selection** - Choose from over 400 active kinases from Human, Rat, Mouse and others.
- **Application** - abm's kinases can be applied towards specific kinase assays and western blot experiments

(주)이즈바이오

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