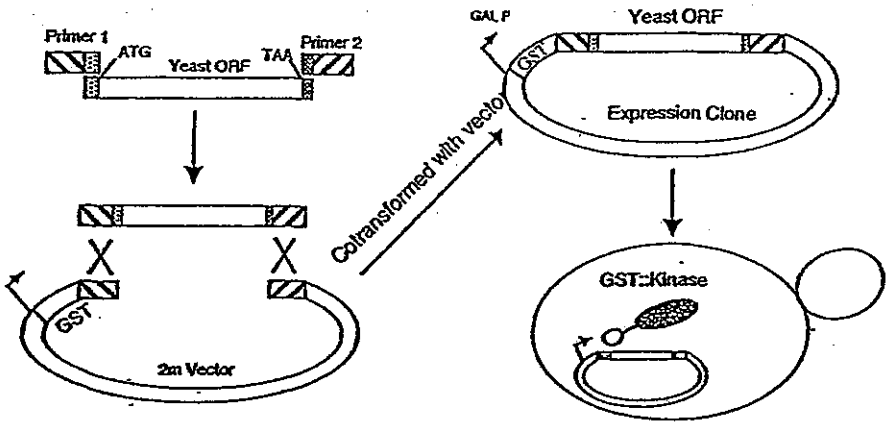

Primer 1
ATG
Yeast ORF
TAA
Primer 2
GST
2m Vector
Cotransformed with vector
GAL P
Yeast ORF
GST
Expression Clone
GST::Kinase

FIG. 1A

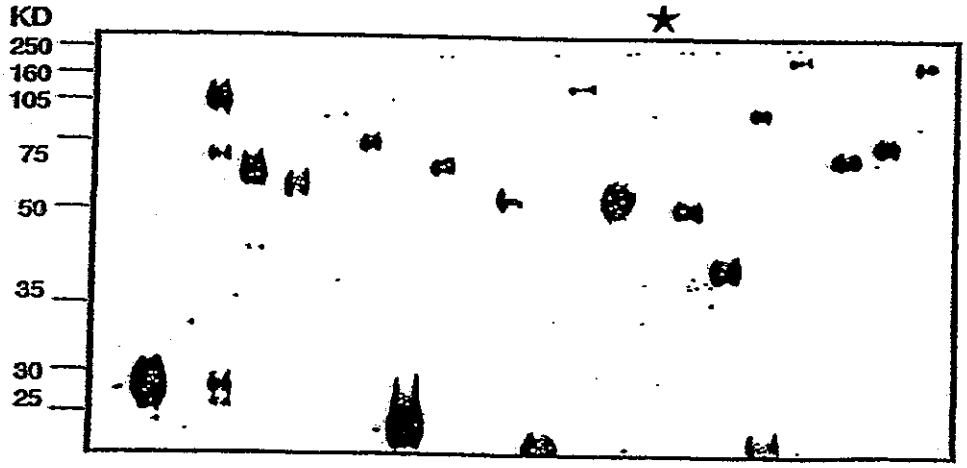

KD
250
160
105
75
50
35
30
25

FIG. 1B

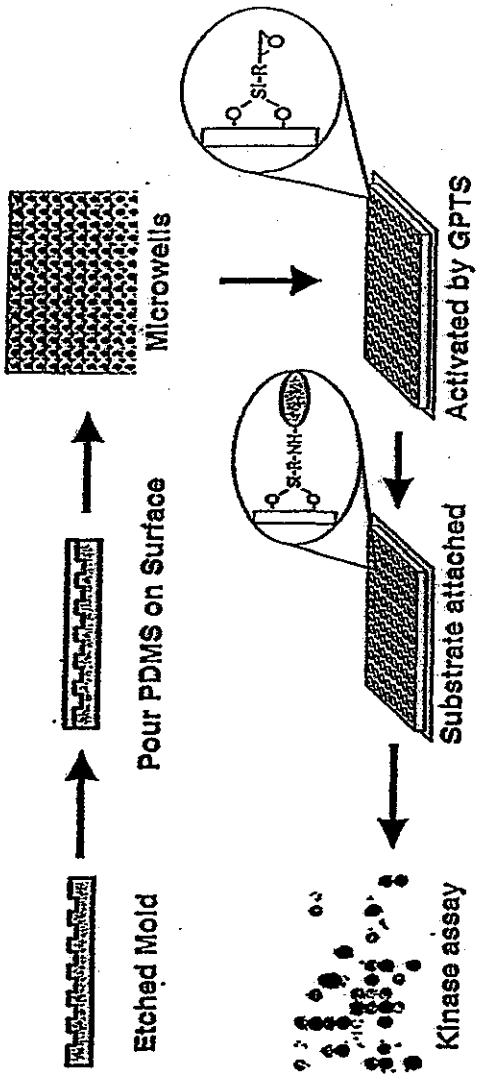

Etched Mold
Pour PDMS on Surface
Microwells
Activated by GPTS
Substrate attached
Kinase assay

FIG. 2A

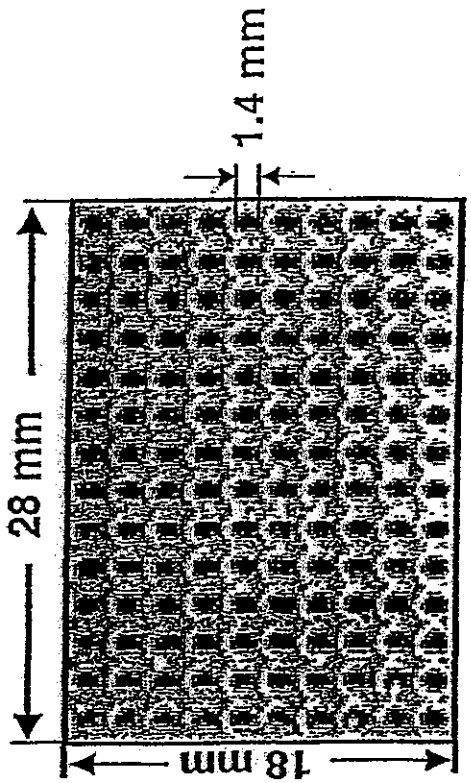

1.4 mm
28 mm
18 mm

FIG. 2B

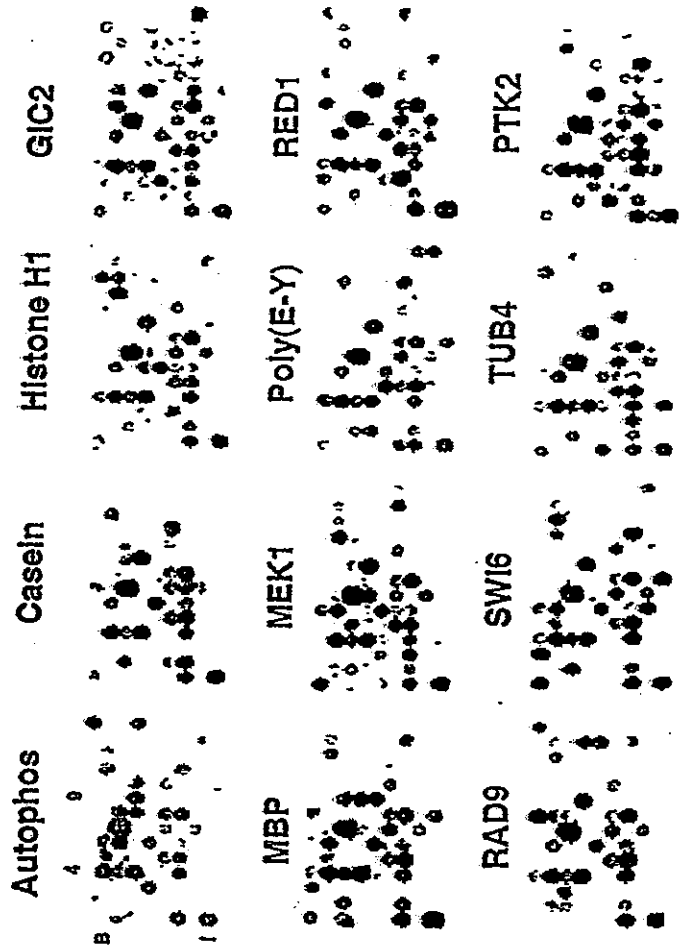

Autophos
Casein
Histone H1
GIC2
MBP
MEK1
Poly(E-Y)
RED1
RAD9
SWI6
TUB4
PTK2

FIG. 3

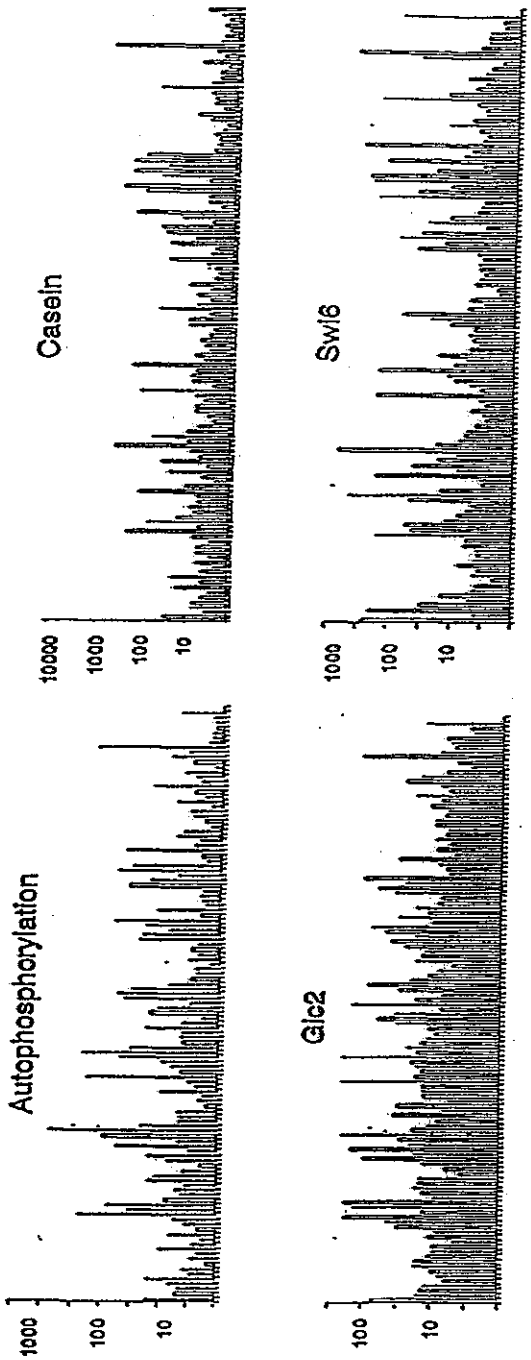

Casein
Swi6
Autophosphorylation
Glc2

FIG.4A

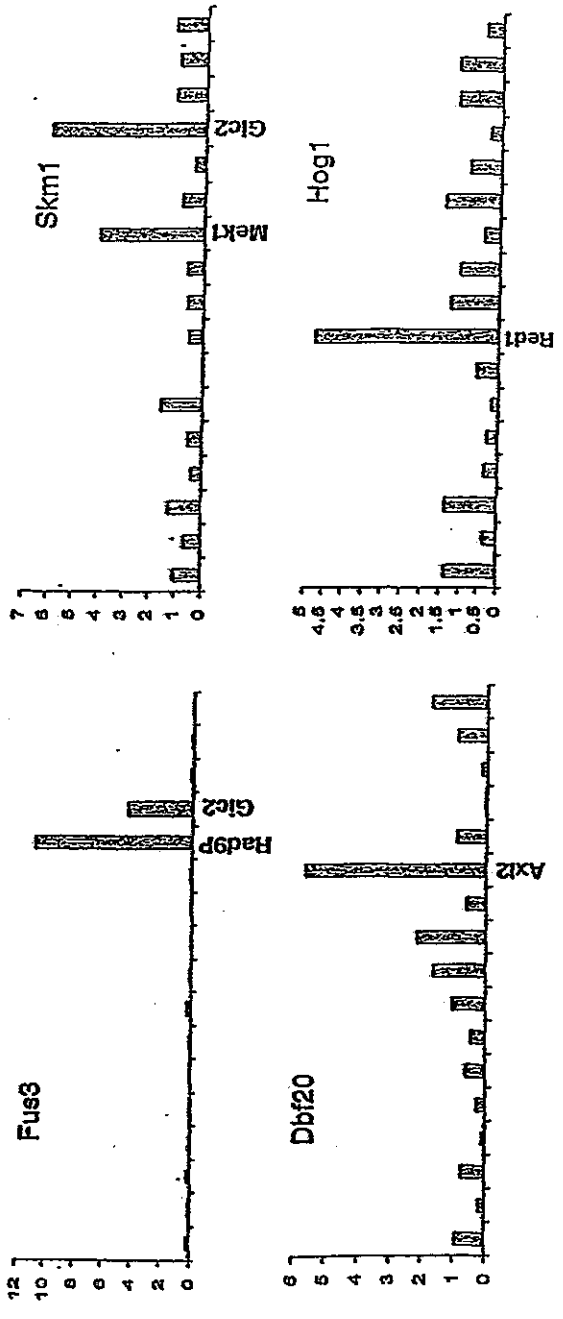

Skm1
Glc2
Mekt
Hog1
Rodt
Fus3
Had9P
Glc2
Dbf20
Axl2

FIG. 4B

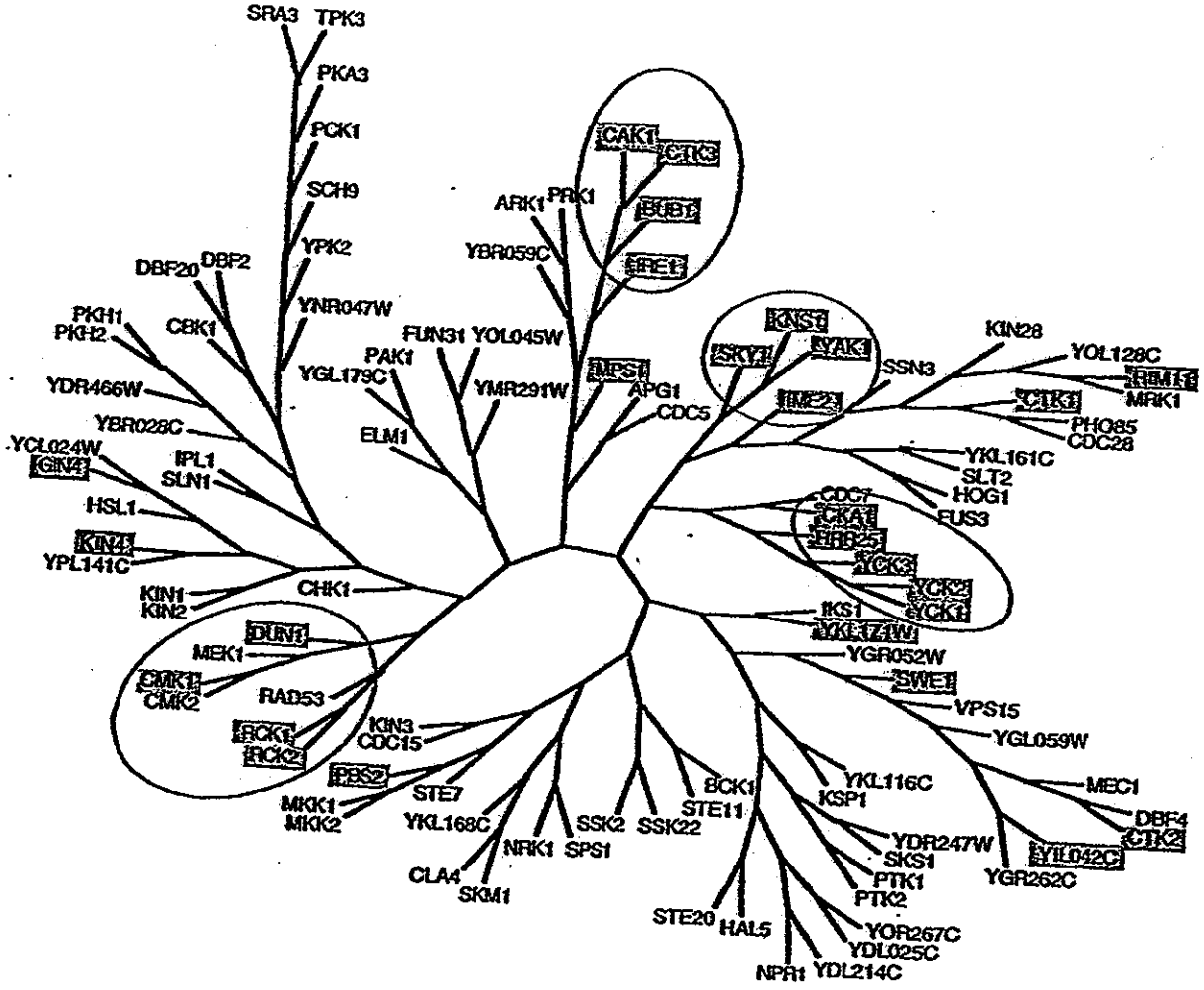

SRA3
TPK3
PKA3
PCK1
SCH9
YPK2
YNR047W
DBF20
DBF2
PKH1
PKH2
CBK1
YDR466W
YBR028C
YCL024W
KIN4
IPL1
SLN1
HSL1
KIN4
YPL141C
KIN1
KIN2
CHK1
DUN1
MEK1
CMK1
CMK2
RAD53
RCK1
RCK2
KIN3
CDC15
PBS2
MKK1
MKK2
STE7
YKL168C
CLA4
SKM1
NRK1
SPS1
SSK2
SSK22
STE11
BCK1
STE20
HAL5
NPR1
YDL214C
YOR267C
YDL025C
YDR247W
SKS1
PTK1
PTK2
YKL116C
KSP1
YGR262C
YIL042C
MEC1
DBF4
CTK2
VPS15
YGL059W
YGR052W
SWE1
IKS1
YKL172W
CDC7
CKA1
HRR25
YCK3
YCK2
YCK1
SKY1
YAK1
KNS1
SSN3
KIN28
YOL128C
RIM15
MRK1
CTK1
PHO85
CDC28
YKL161C
SLT2
HOG1
FUS3
IME2
ARK1
PRK1
CAK1
CTK3
BUB1
IPL1
YBR059C
FUN31
YOL045W
PAK1
YGL179C
YMR291W
ELM1
MPS1
APG1
CDC5

FIG. 5A

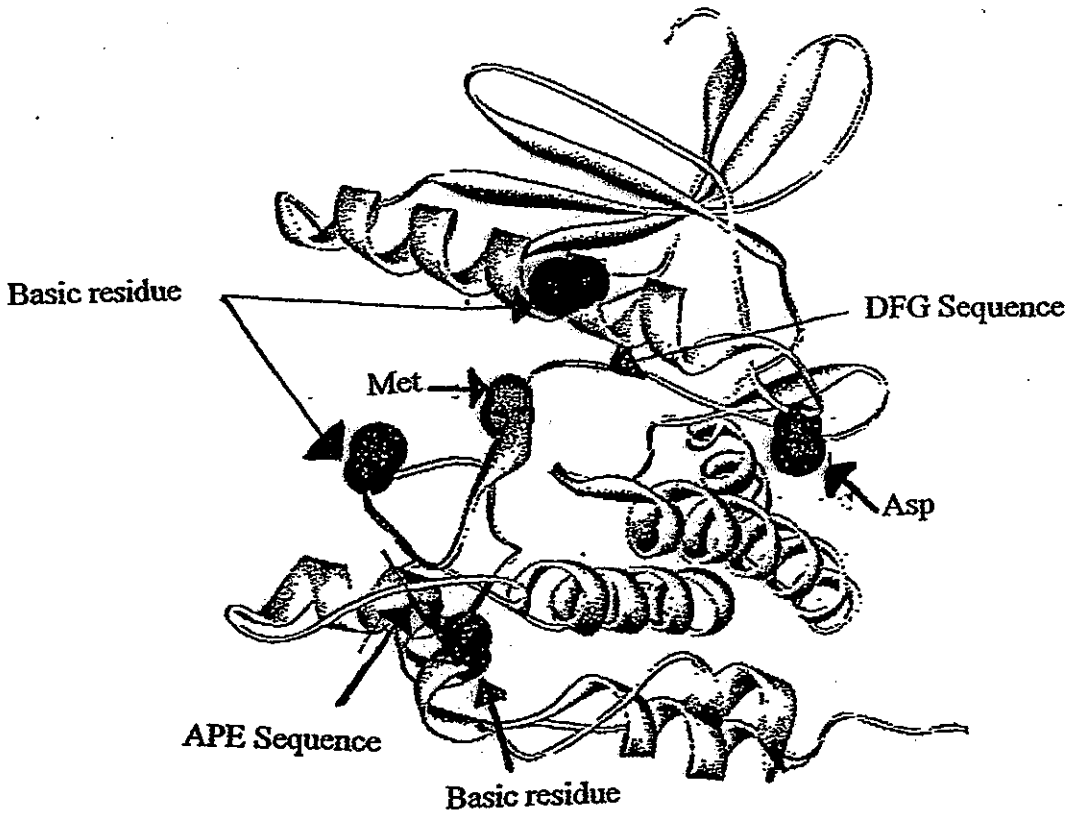

Basic residue
DFG Sequence
Met
Asp
APE Sequence
Basic residue

FIG.5B

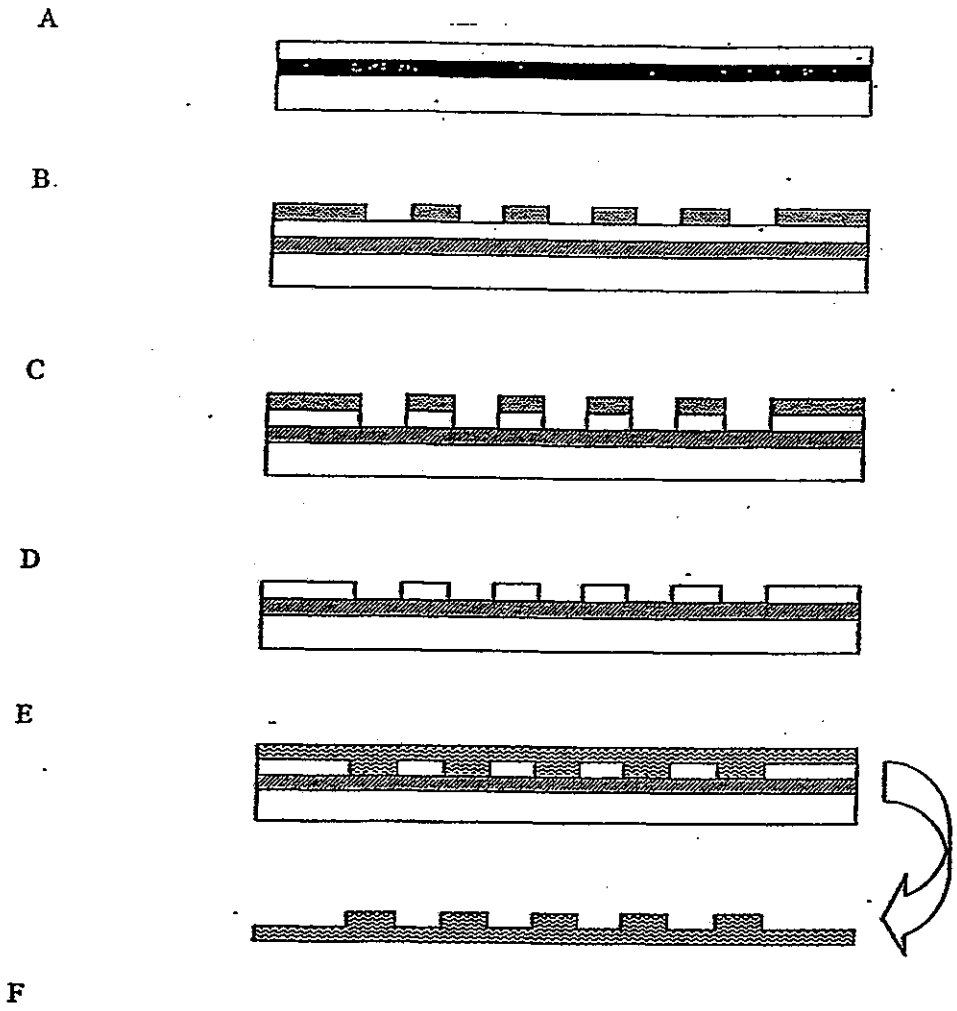


FIG. 6

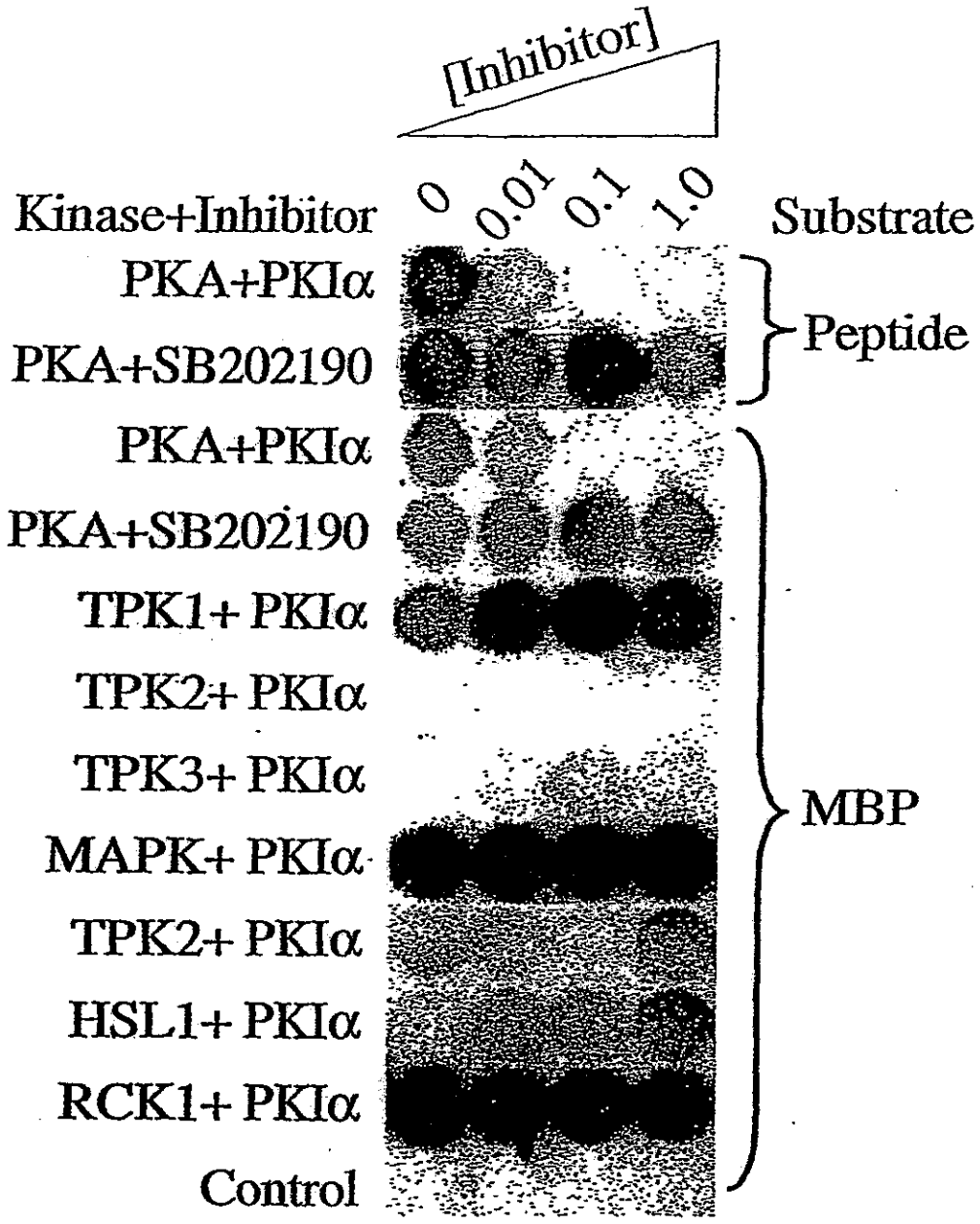

[Inhibitor]
0
0.01
0.1
1.0
Kinase+Inhibitor
Substrate
PKA+PKIα
PKA+SB202190
Peptide
PKA+PKIα
PKA+SB202190
TPK1+ PKIα
TPK2+ PKIα
TPK3+ PKIα
MAPK+ PKIα
TPK2+ PKIα
HSL1+ PKIα
RCK1+ PKIα
Control
MBP

FIG. 7