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### ABBREVIATIONS AND SYMBOLS

A	adenine base
$\alpha$	alpha
ACRS	amplified created restriction site
<i>Bst</i> NI	<i>Bacillus stearothermophilus</i> N
bp	base pair
$\beta$	beta
BSA	bovine serum albumin
BAD	Bcl-2, BclXL-antagonist causing cell death
cm	centrimeter
C	cytosine base
$^{\circ}$ C	degree celsius
dATP	deoxyadenosine triphosphates
dCTP	deoxycytidine triphosphates
dGTP	deoxyguanosine triphosphates
dTTP	deoxythymidine triphosphates
dNTPs	deoxynucleotide triphosphates
DNA	deoxyribonucleic acid
ddATPs	dideoxyadenosine triphosphates
ddCTPs	dideoxycytidine triphosphates
ddGTPs	dideoxyguanosine triphosphates
ddTTPs	dideoxythymidine triphosphates
ddNTPs	dideoxynucleotide triphosphates
EGFR	epidermal growth factor receptor
EDTA	ethylenediaminetetra-acetic acid
ERK	extracellular signal-regulated kinase
$\gamma$	gamma

gm	gram
G	guanine base
GEFs	guanine nucleotide exchange factors
GTP	guanosine triphosphate
GDP	guanosine diphosphate
GAPs	GTPase activating proteins
Grb2	growth factor receptor binding protein 2
H- <i>ras</i>	harvey rat sarcoma virus
<i>HeaIII</i>	<i>Heamophilus aegyptius</i>
hr	hour
kb	kilobase
kDa	kilodaltons
K- <i>ras</i>	kirsten rat sarcoma virus
L	liter
LPM	low malignant potential
MgCl <sub>2</sub>	Magnisium chloride
mRNA	messenger ribonucleic acid
T <sub>m</sub>	melting temperature
μg	microgram
μl	microliter
ml	milliliter
mm	millimeter
mM	millimolar
min	minute
MAP	mitogen activated protein
MEK	mitogen-activated protein kinase kinase
M	molar
nm	nanometer
ng	nanogram
N- <i>ras</i>	neuroblastoma rat sarcoma virus

NRTKs	nonreceptor tyrosine kinases
TEMET	N,N,N',N'-tetramethylethylenediamine
OD	optical density
OT	ovarian cancer tissue
%	percentage
pmol	picomolar
PDGFR	platelet derived growth factor receptor
PCR	polymerase chain reaction
PI3 K	phosphoinositide 3-kinase
Ras	rat sarcoma virus homolog
RasGRF	Ras guanine nucleotide release-inducing factor
RasGRP	Ras guanine nucleotide-releasing protein
PKB	protein kinase B
RFLP	restriction fragment length polymorphism
rpm	revolution per minute
sec	second
ssDNA	single stranded DNA
SDS	sodium dodecyl sulphate
SH2	Src-homology-2
SH3	Src-homology-3
SSCP	single strand conformation polymorphism
T	thymine base
T <sub>m</sub>	melting temperature
TBE	tris-borate EDTA
TE	Tris-base EDTA
TSR	template suppression reagent
UV	ultra violet
U	unit
V	volt