TcR Leader	MACPGFLWALVISTCLEFS
FR1	MAQVQLVQSGAEVKKPGASVKVSCKASGYTFT
CDR1	SYGIS
FR2	WVRQAPGQGLEWMG
CDR2	WISAYNGNTNYAQKLQG
FR3	RVTITTDTSTSTAYMELRSLRSDDTAVYYCAR
CDR3	ASLYSKFDY
FR4	WGQGTLVTVST

FR = Framework
CDR= Complementary Determining Region

FIG. 1

Figure 2. *Amino Acid Sequence of MatDC16-Cy4-MAGE-A1.*

Note that Cy4 contains stop codons as it is a genomic DNA containing exons as well as introns.

MSLEQRSLHCKPEEALEAQQEALGLVCVQAATSSSSPLVLGTLEEVPTAGSTDPPQSPQGASAFPTTINFTRQRQPSEGSSSREEEGPSTSCILES
LFRAVITKKVADLVGFLLLKYRAREPVTKAEMLESVIKNYKHCFPEIFGKASESLQLVFGIDVKEADPTGHSYVLVTCLGLSYDGLLGDNQIMPKT
GFLIIVLVMIAMEGGHAPEEEIWEELSVMEVYDGREHSAYGEPRKLLTQDLVQEKYLEYRQVPDSDPARYEFLWGPRALAETSYVKVLEYVIKVSA
RVRFFFPSLREAALREEEEGVMAQVQLVQSGAEVKKPGASVKVSCKASGYTFTSYGISWVRQAPGQGLEWMGWISAYNGNTNYAQKLQGRVTITTD
TSTSTAYMELRSLRSDDTAVYYCARASLYSKFDYWGQGTLVTVSTGECGREPRHWTLHGPSRIDKNRGASAPWAQLCPTPRSHGTTSLAASTKGPS
VFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTKTYTCNVDHKPSNTKVDKRVESKYG
PPCPSCPAPEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEY
KCKVSNKGLPSSIEKTISKAKGQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKS
RWQEGNVFSCSVMHEALHNHYTQKSLSLSLGKRDTHLPGLSYSPSGLYSLSSVVTVPSSSLGTKTYTXNVDHKPSNTKVDKRVGERPAQGGRVSAG
SQAQPSCLDRTPAVQPQPRAARHAPSVSSPGGL*PPHSCSGRGSSGFFHQAPGSHRLDAPTPGPAHTGAGAALRPAKSHIREDPAPDLSPPQRPNS
PLPQLRHLLSSQI*VTPNLLSAESKYGPPCPSCPGKPTQASPSSSRRDRCPRVACIQGQAPAGC*RIHLHLFLST*VMSLEQRSLHCKPEEALEAQ
QEALGLVCVQAATSSSSPLVLGTLEEVPTAGSTDPPQSPQGASAFPTTINFTRQRQPSEGSSSREEEGPSTSCILESLFRAVITKKVADLVGFLLL
KYRAREPVTKAEMLESVIKNYKHCFPEIFGKASESLQLVFGIDVKEADPTGHSYVLVTCLGLSYDGLLGDNQIMPKTGFLIIVLVMIAMEGGHAPE
EEIWEELSVMEVYDGREHSAYGEPRKLLTQDLVQEKYLEYRQVPDSDPARYEFLWGPRALAETSYVKVLEYVIKVSARVRFFFPSLREAALREEEE
GV

Figure 3. *Cloning site of pPicZαB.*

Figure 4. *Cloning site of pPicZFVH.*

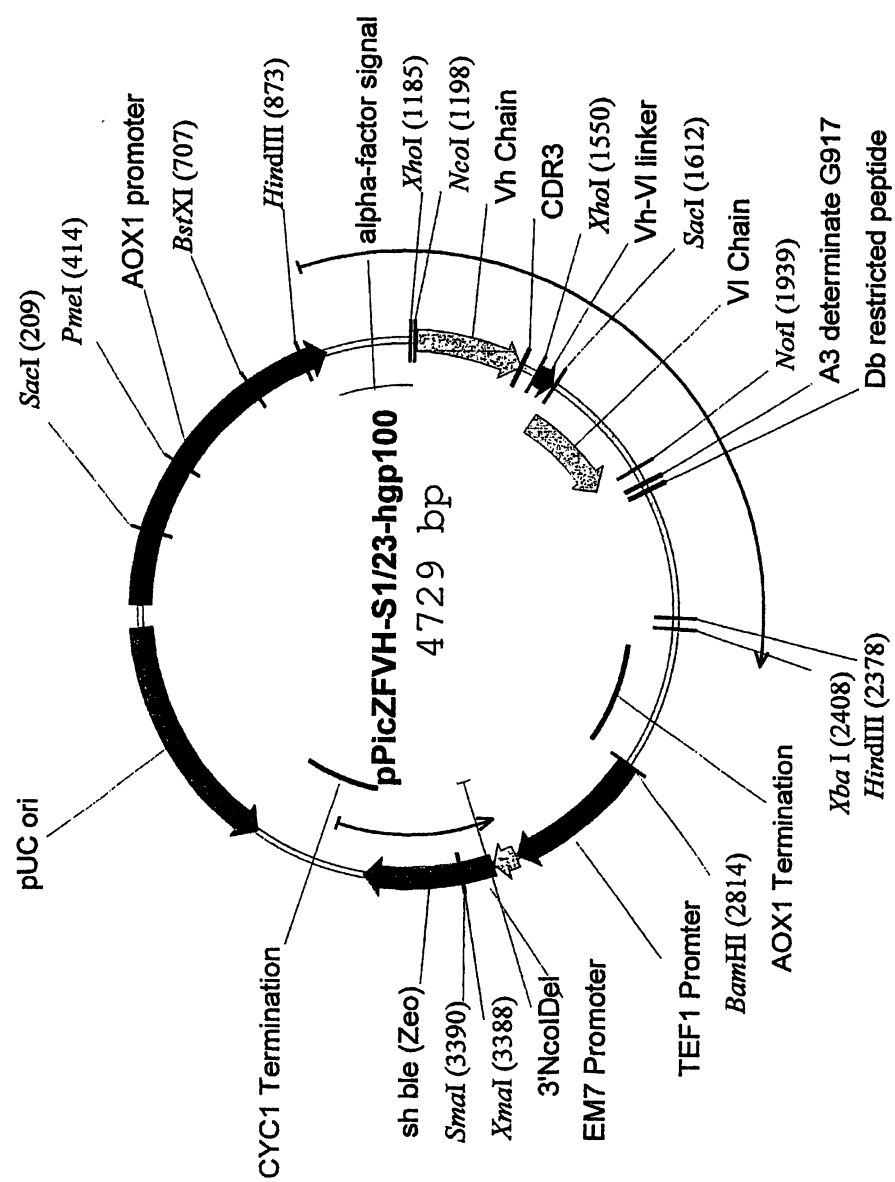

pPicZFVH-S1/23-hgp100
4729 bp
SacI (209)
PmeI (414)
AOX1 promoter
BstXI (707)
HindIII (873)
alpha-factor signal
XhoI (1185)
NcoI (1198)
Vh Chain
CDR3
XhoI (1550)
Vh-Vl linker
SacI (1612)
Vl Chain
NotI (1939)
A3 determinate G917
Db restricted peptide
Xba I (2408)
HindIII (2378)
AOX1 Termination
BamHI (2814)
TEF1 Promter
EM7 Promoter
3'NcoIDel
XmaI (3388)
SmaI (3390)
sh ble (Zeo)
CYC1 Termination
pUC ori

FIG. 5

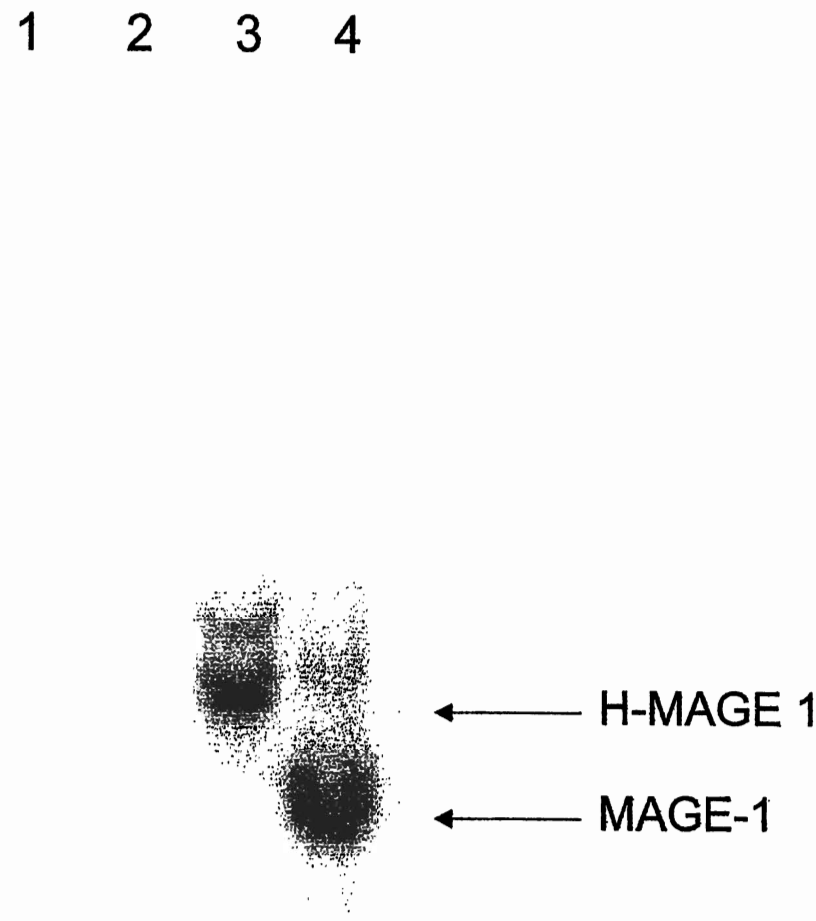


FIG. 6

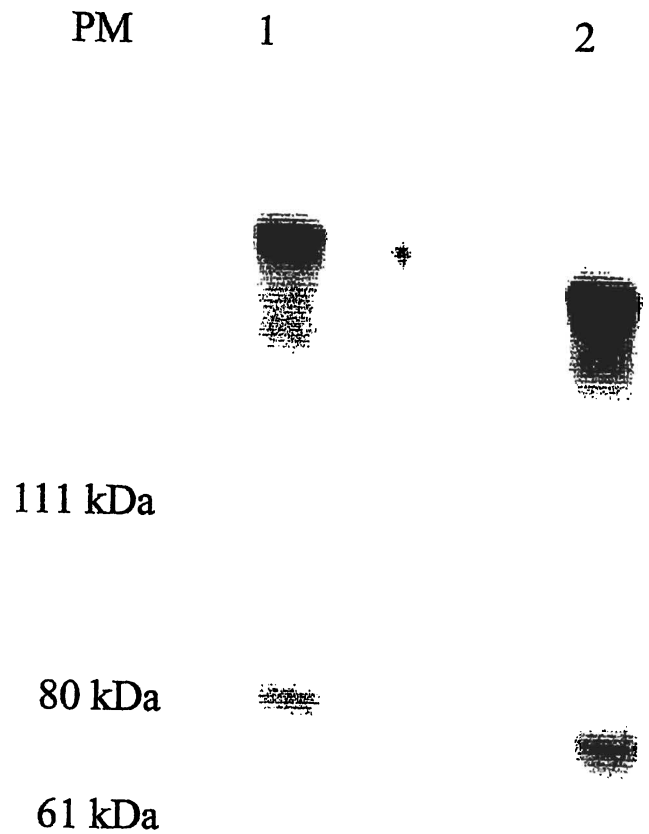


FIG. 7

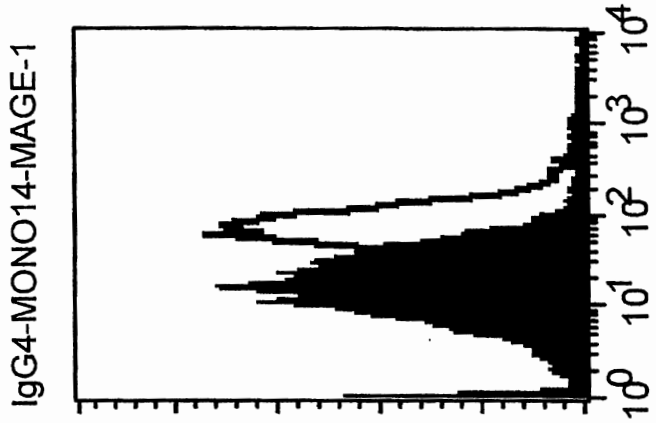


FIG. 8C

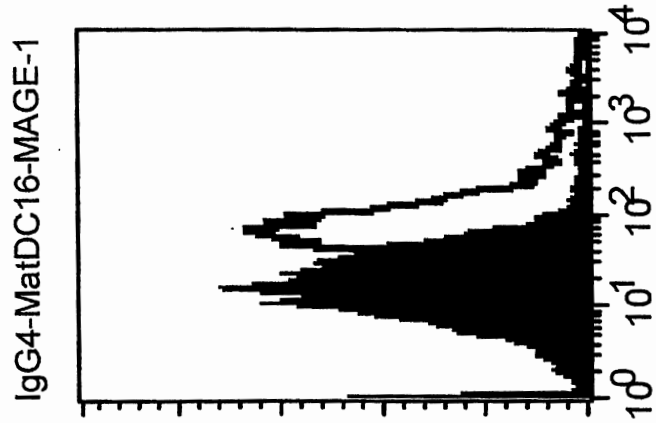


FIG. 8B

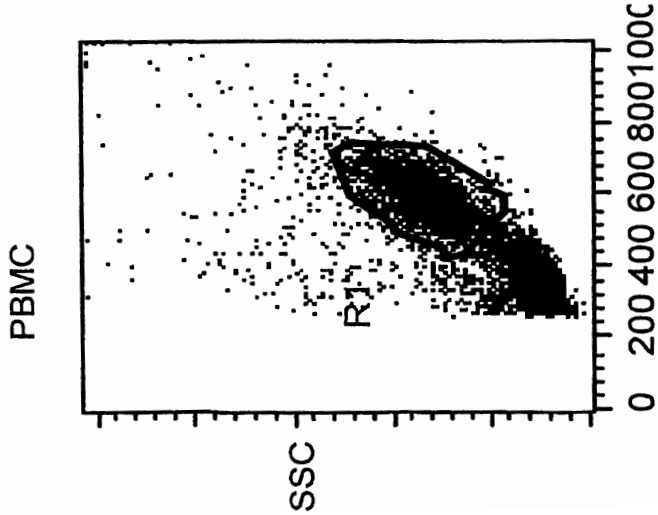


FIG. 8A

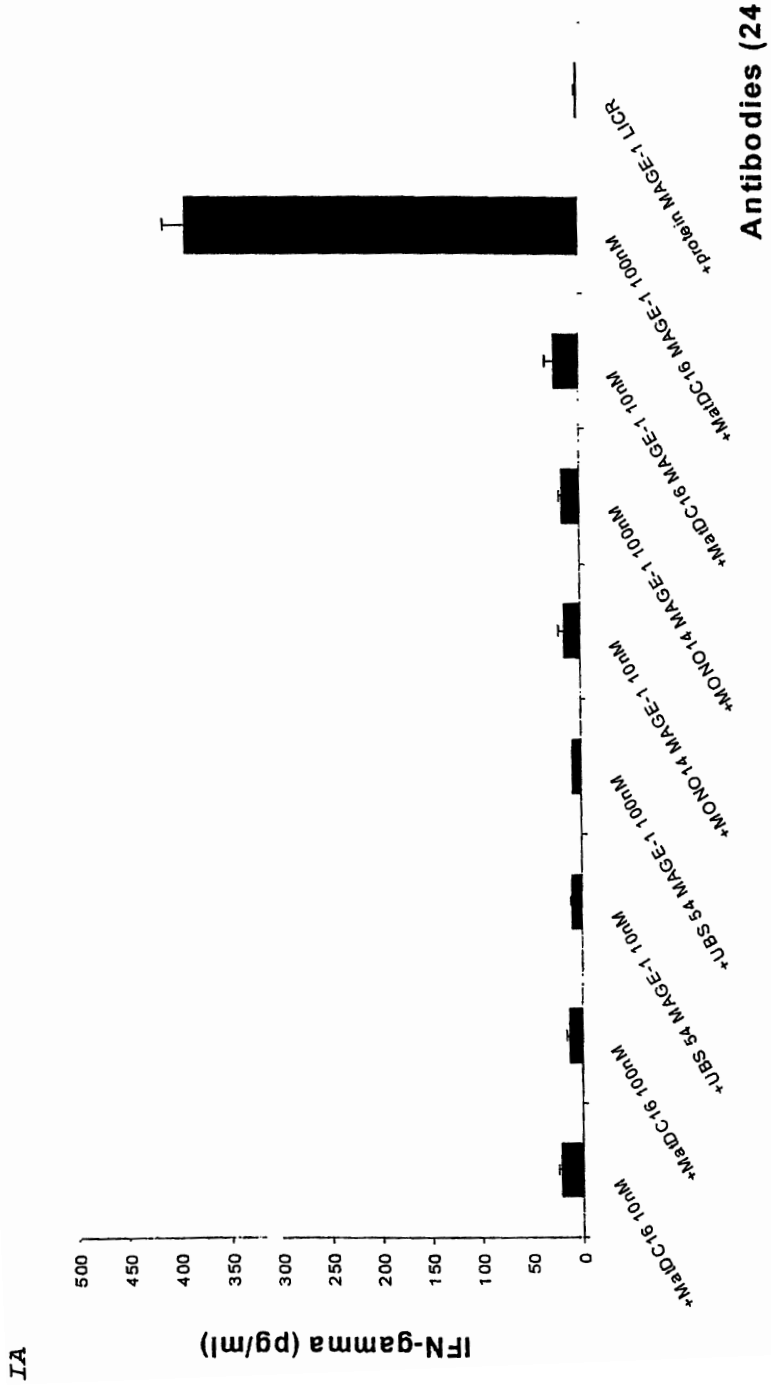

IFN-gamma (pg/ml)
500
450
400
350
300
250
200
150
100
50
0
+MaDC16 10nM
+UBS 54 MAGE-1 10nM
+MaDC16 100nM
+UBS 54 MAGE-1 100nM
+MONO14 MAGE-1 10nM
+MONO14 MAGE-1 100nM
+MaDC16 MAGE-1 10nM
+MaDC16 MAGE-1 100nM
+protein MAGE-1 LICR
Antibodies (24 hrs)

FIG. 9A

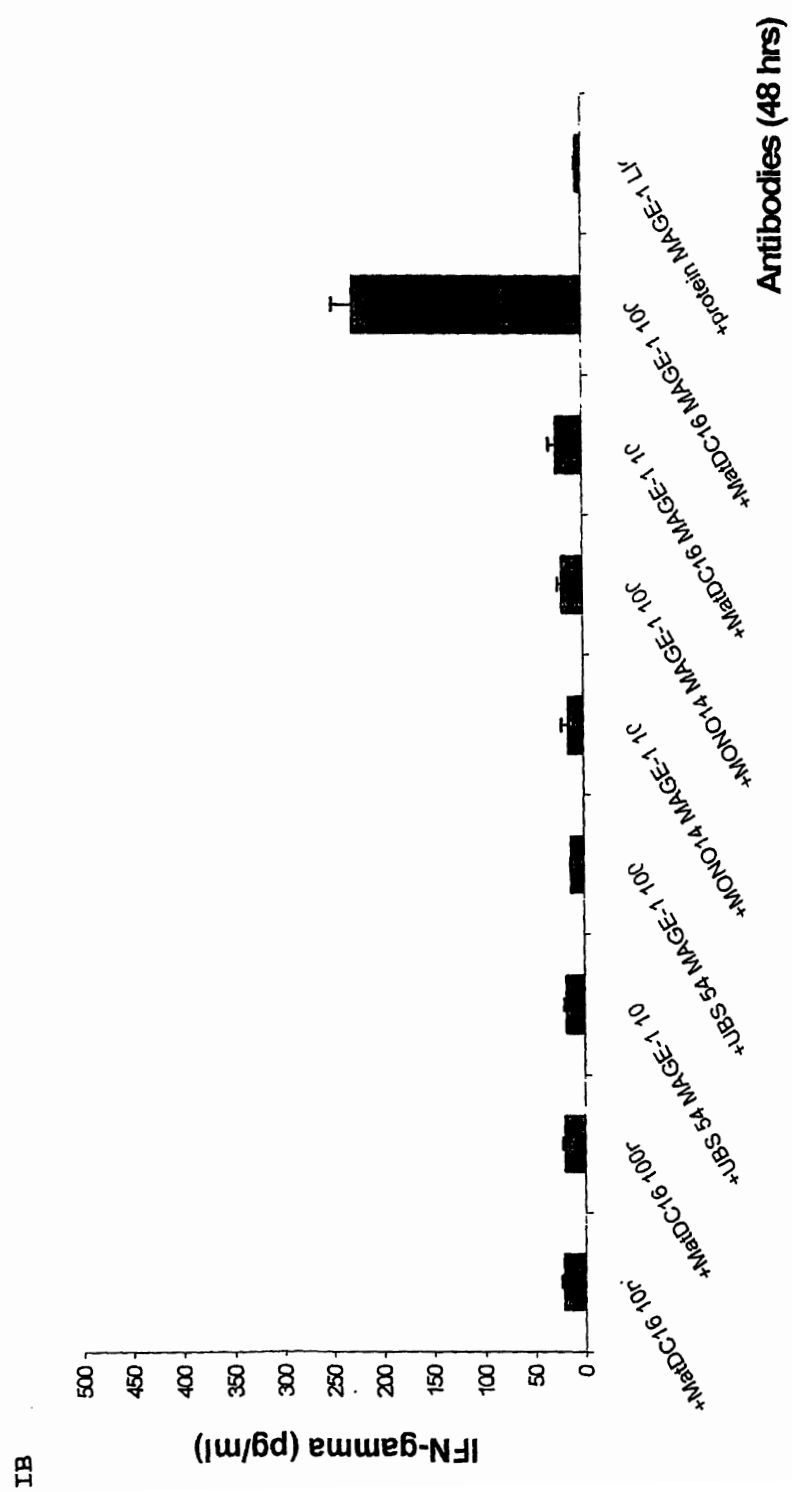

Antibodies (48 hrs)
IFN-gamma (pg/ml)
500
450
400
350
300
250
200
150
100
50
0
+MatDC16 10F
+MatDC16 100F
+UBS 54 MAGE-1 10
+UBS 54 MAGE-1 10F
+MONO14 MAGE-1 1F
+MONO14 MAGE-1 10F
+MatDC16 MAGE-1 1F
+MatDC16 MAGE-1 10F
+protein MAGE-1 LF

FIG. 9B

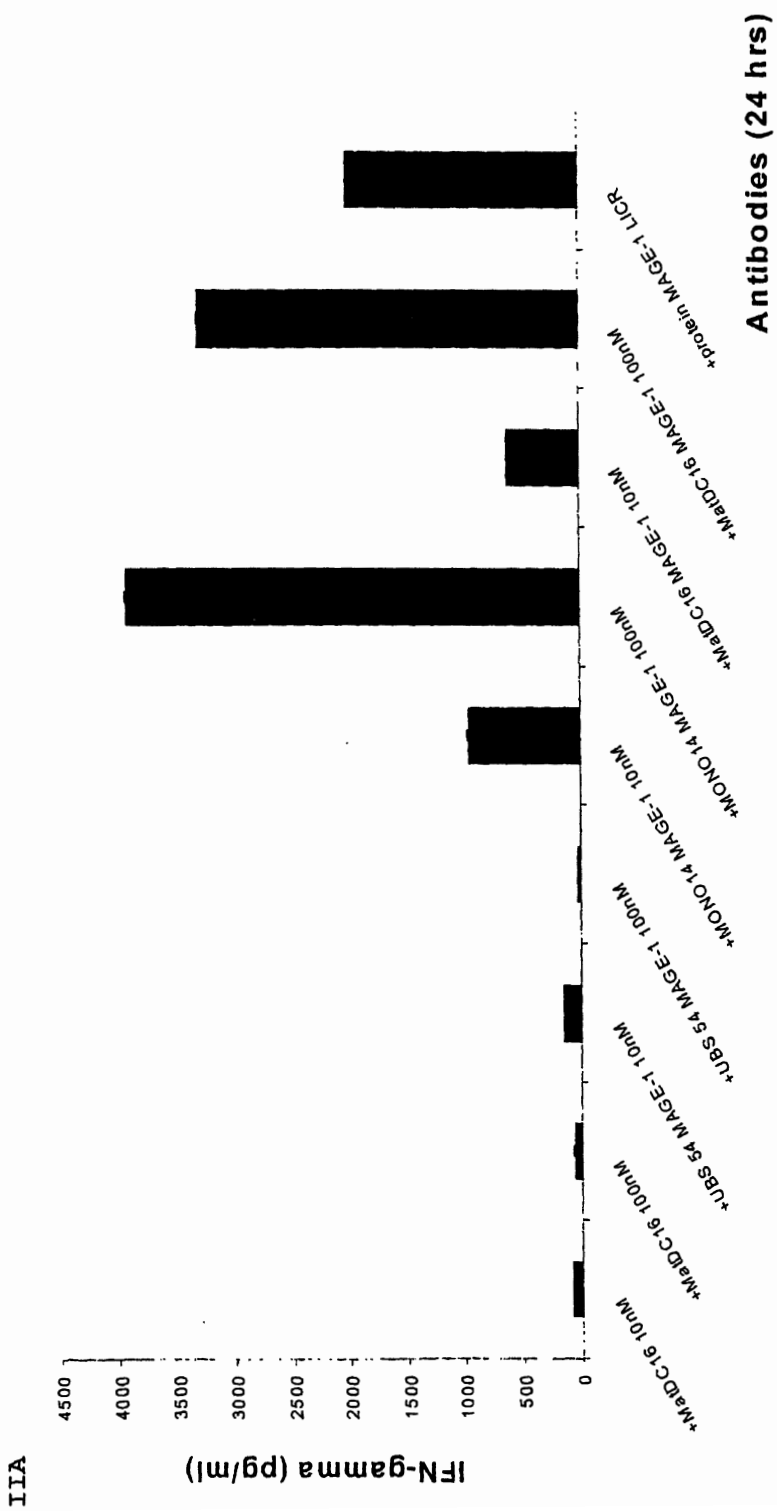

Antibodies (24 hrs)
IFN-gamma (pg/ml)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
+maDC16 10nM
+maDC16 100nM
+UBS 54 MAGE-1 10nM
+UBS 54 MAGE-1 100nM
+MONO14 MAGE-1 10nM
+MONO14 MAGE-1 100nM
+maDC16 MAGE-1 10nM
+maDC16 MAGE-1 100nM
+protein MAGE-1 LICR

FIG. 9C

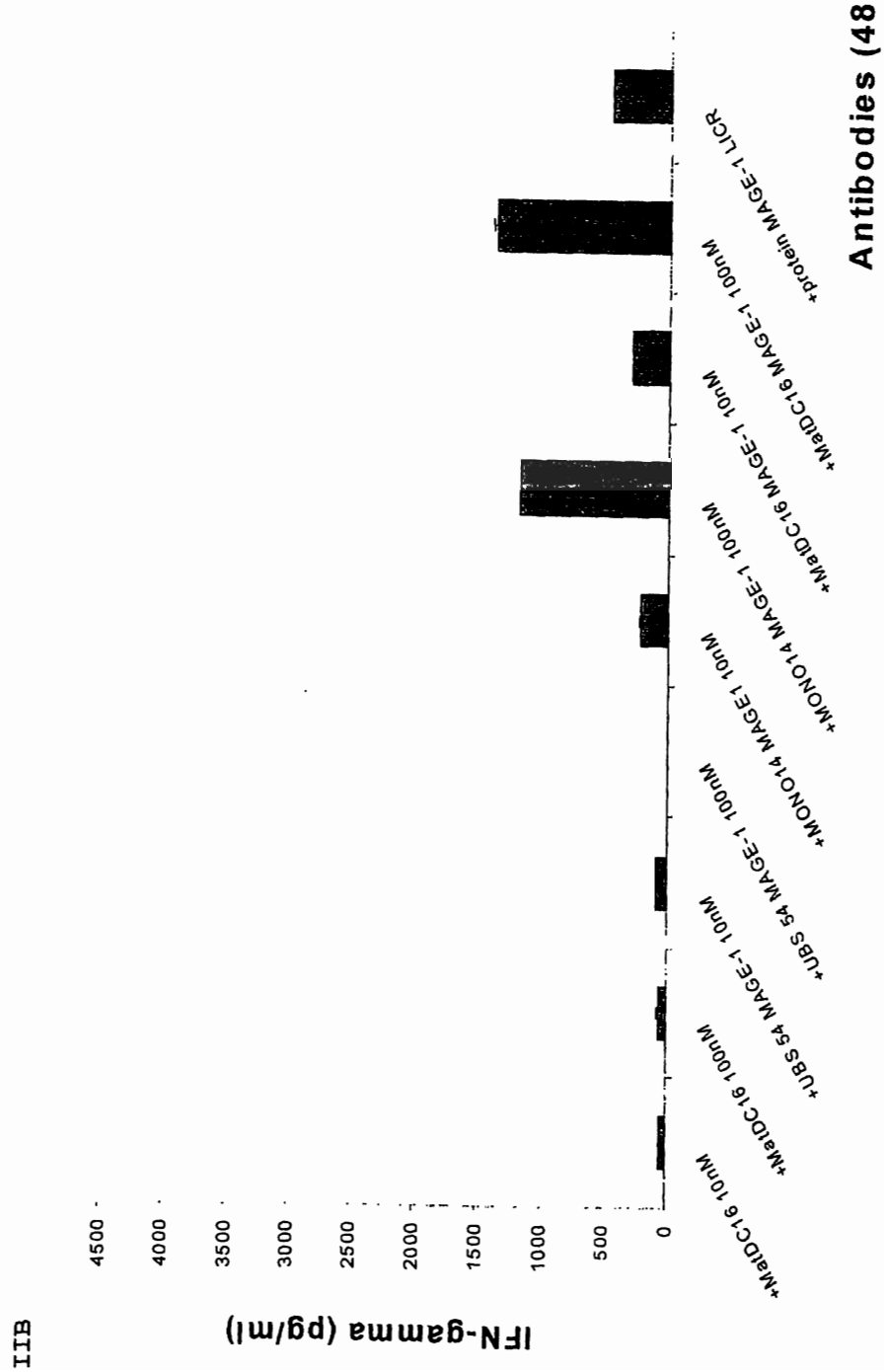

IFN-gamma (pg/ml)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
+MaIDC16 10nM
+MaIDC16 100nM
+UBS 54 MAGE-1 10nM
+UBS 54 MAGE-1 100nM
+MONO14 MAGE1 10nM
+MONO14 MAGE-1 100nM
+MaIDC16 MAGE-1 10nM
+MaIDC16 MAGE-1 100nM
+protein MAGE-1 LICR
Antibodies (48 hrs)

FIG. 9D