FIG. 1

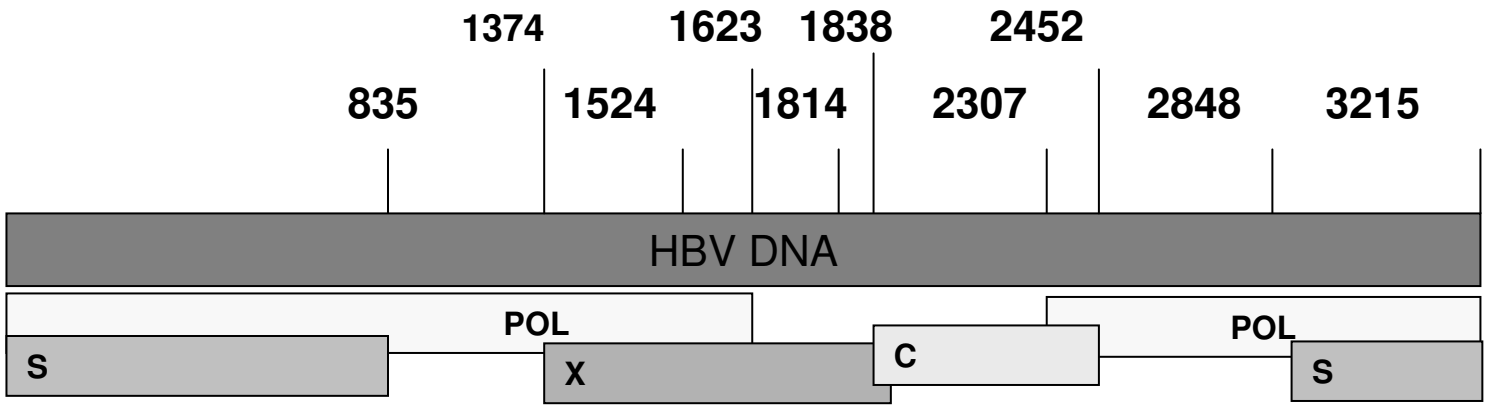

1374
1623
1838
2452
835
1524
1814
2307
2848
3215
HBV DNA
POL
POL
S
X
C
S

FIG. 2

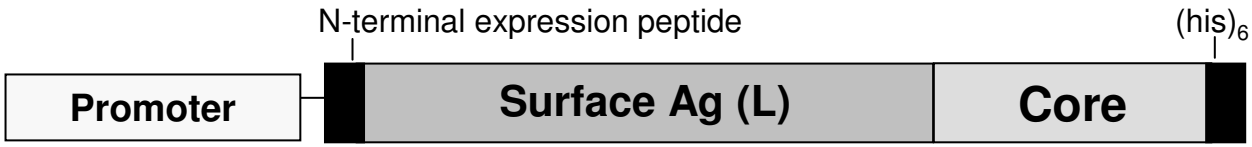


FIG. 3

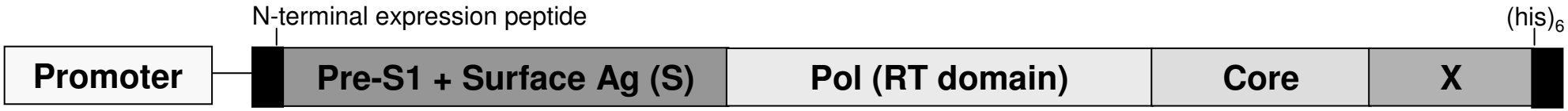


FIG. 4

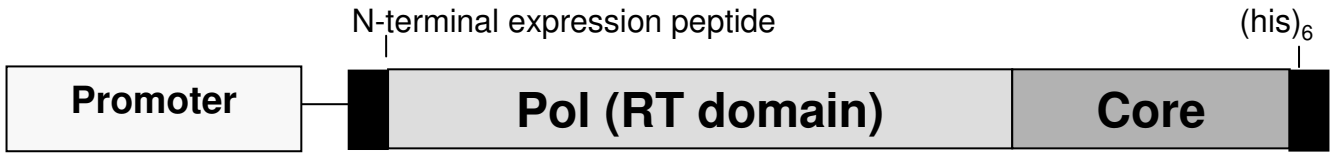


FIG. 5

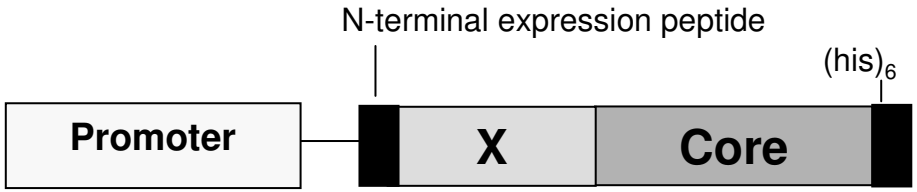


FIG. 6

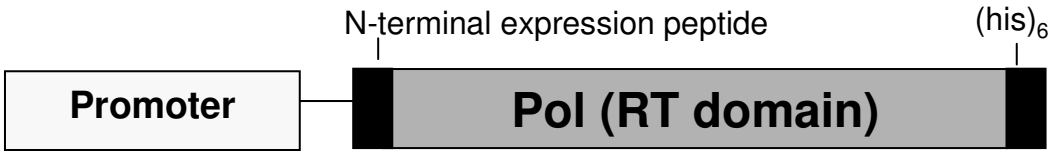


FIG. 7

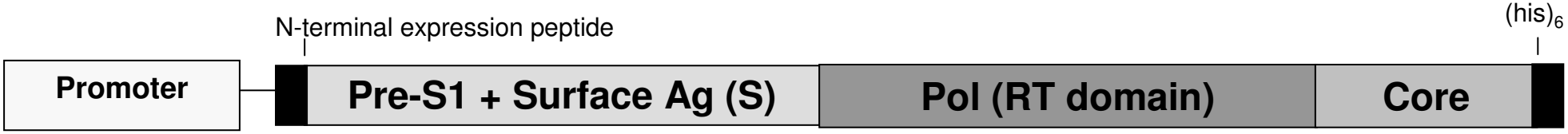


FIG. 8

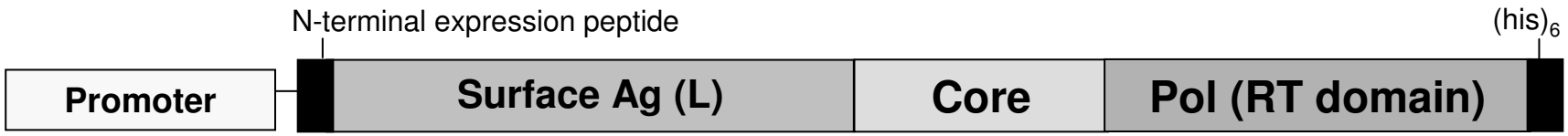


FIG. 9

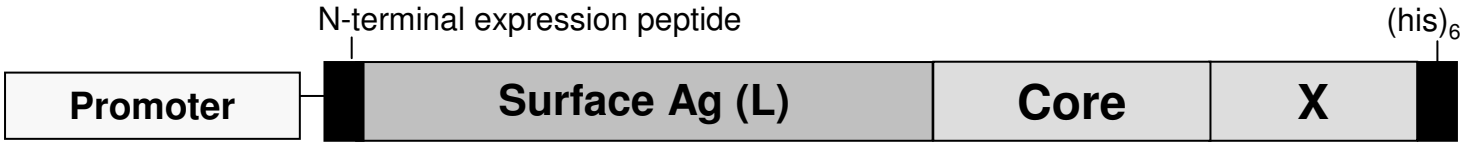


FIG. 10

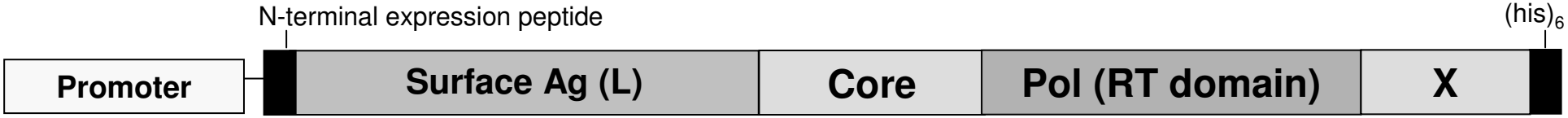


FIG. 11

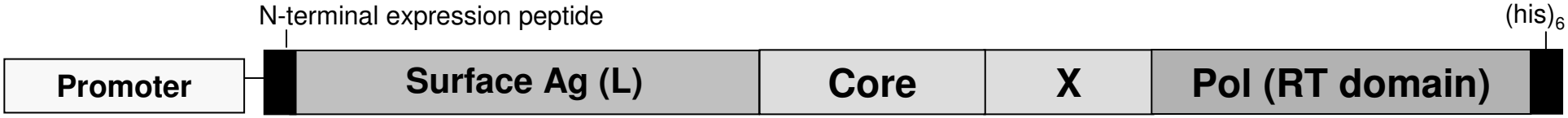


FIG. 12

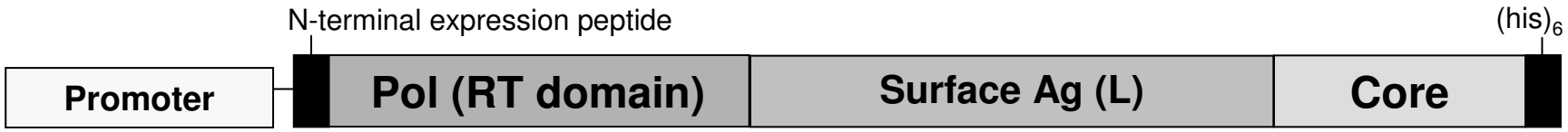


FIG. 13

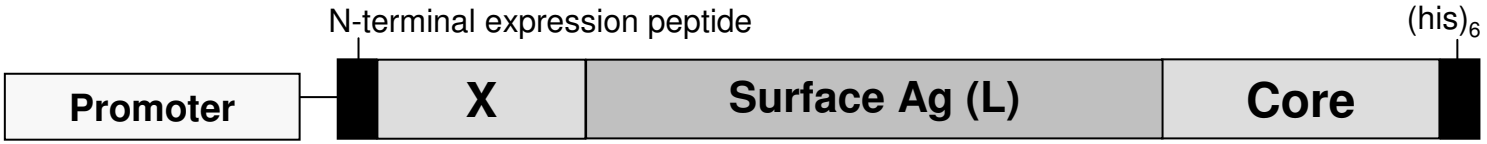


FIG. 14

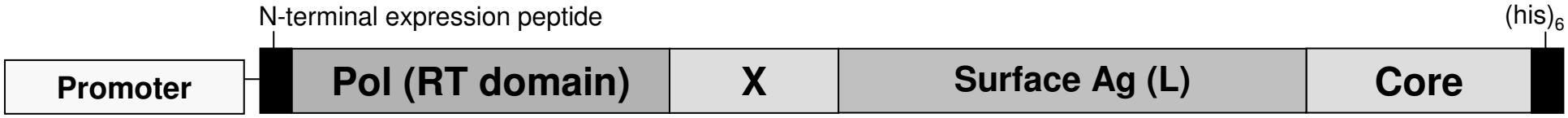


FIG. 15

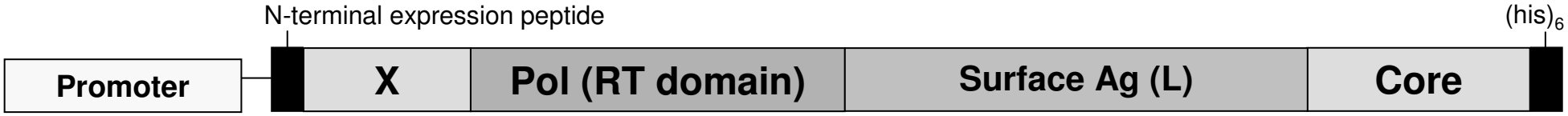


FIG. 16

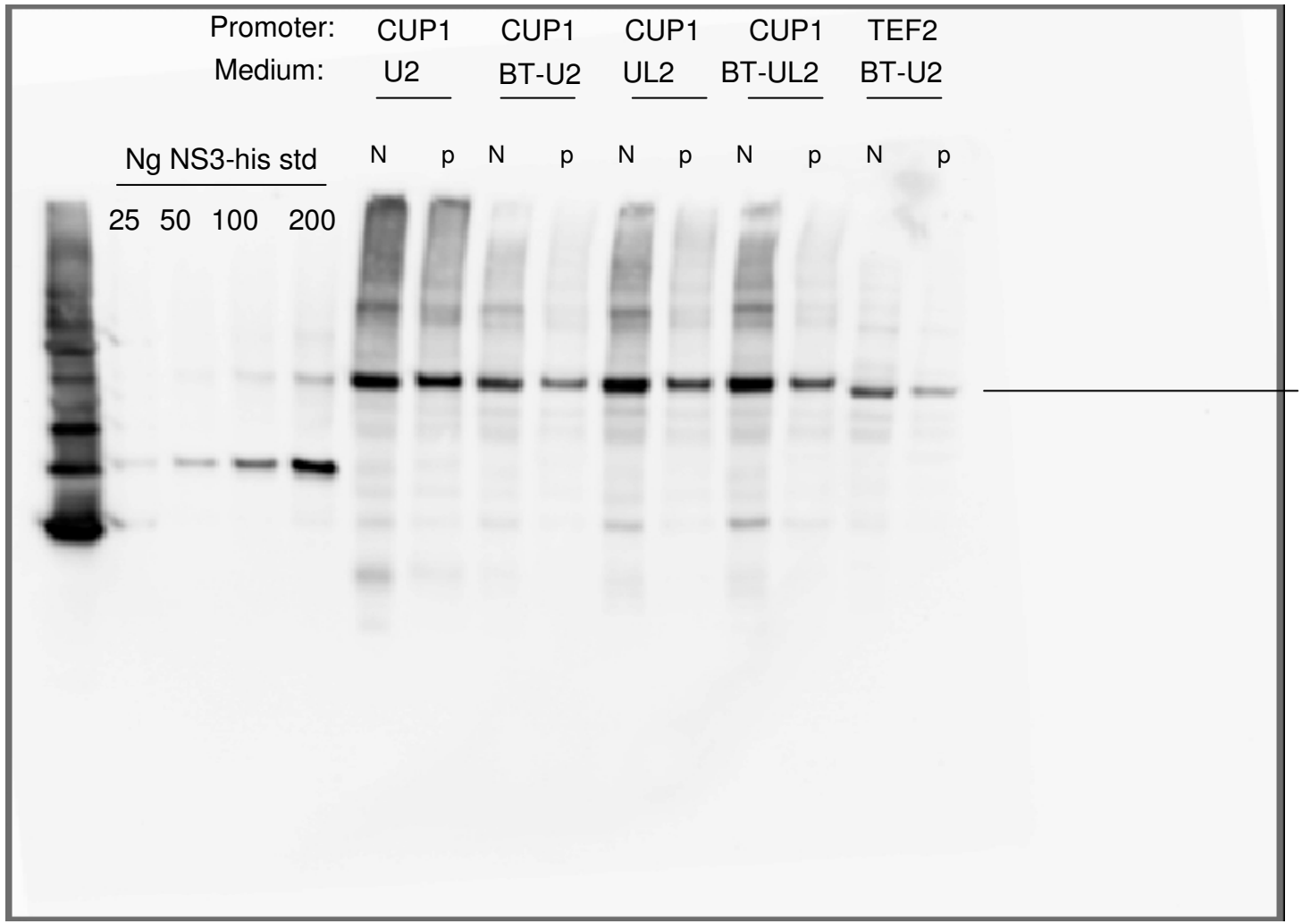

Promoter:
CUP1
CUP1
CUP1
CUP1
TEF2
Medium:
U2
BT-U2
UL2
BT-UL2
BT-U2
Ng NS3-his std
25 50 100 200
N p N p N p N p N p
Score

FIG. 17

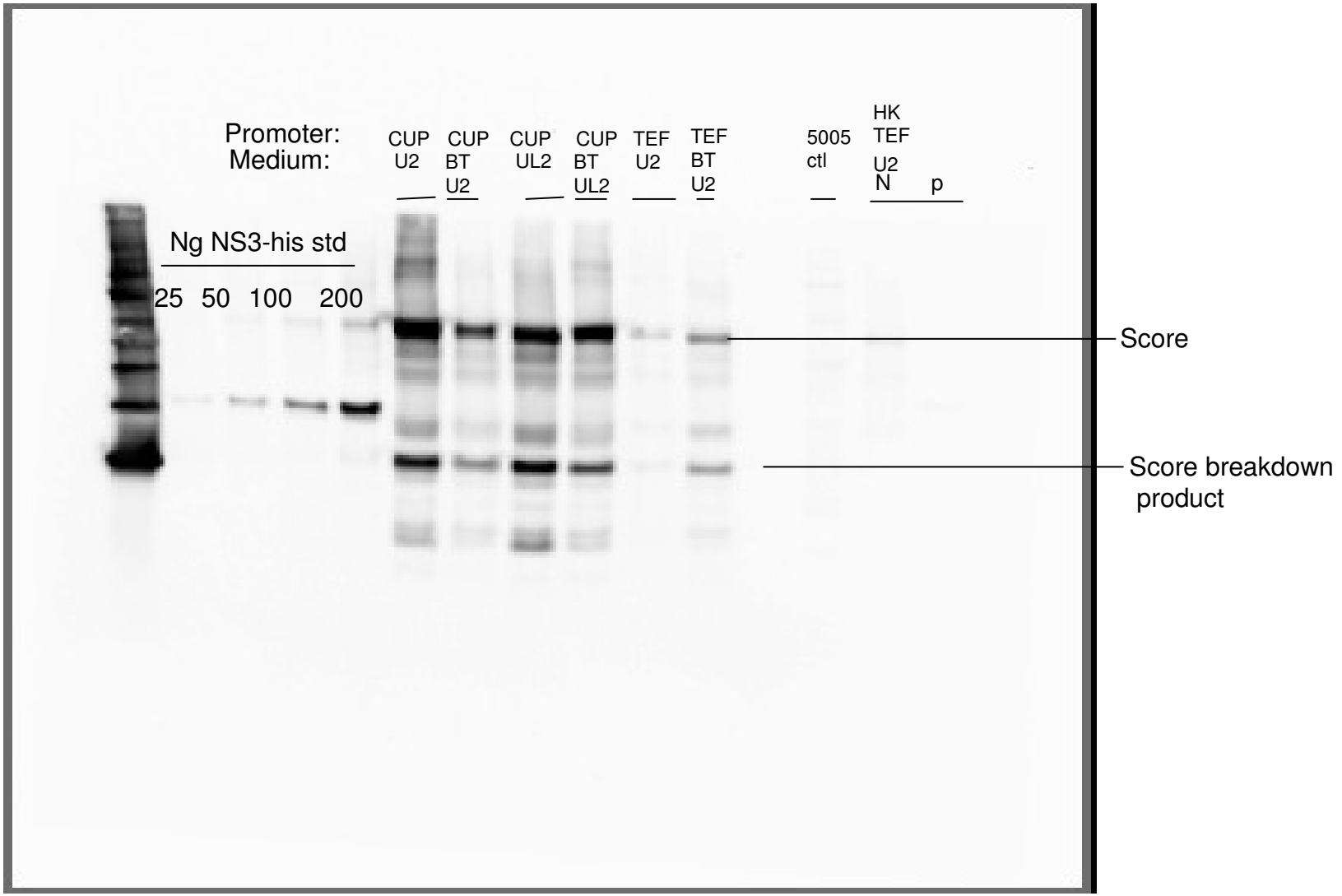

Promoter:
Medium:
CUP U2
CUP BT U2
CUP UL2
CUP BT UL2
TEF U2
TEF BT U2
5005 ctl
HK TEF U2
N
p
Ng NS3-his std
25 50 100 200
Score
Score breakdown product

FIG. 18

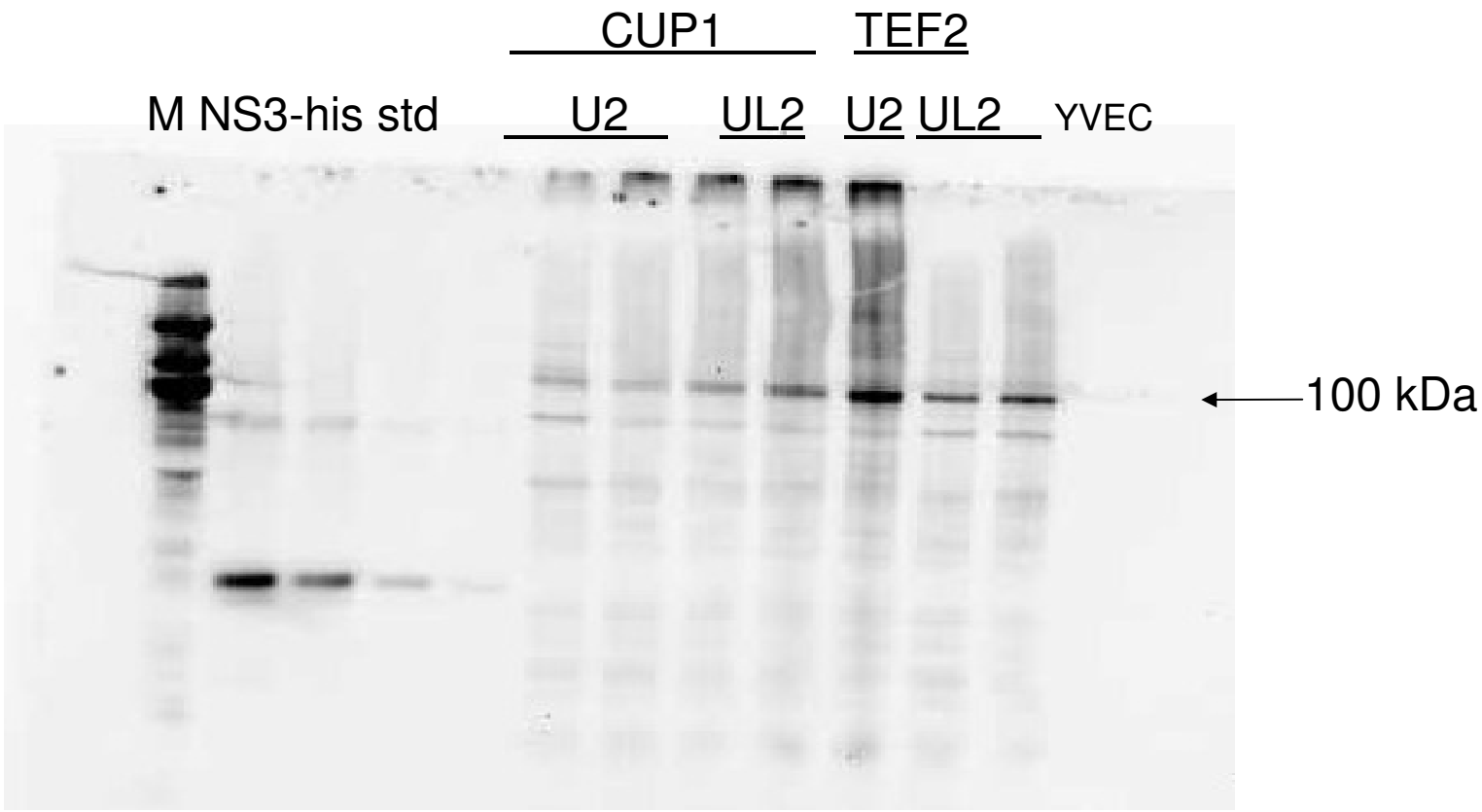


FIG. 19

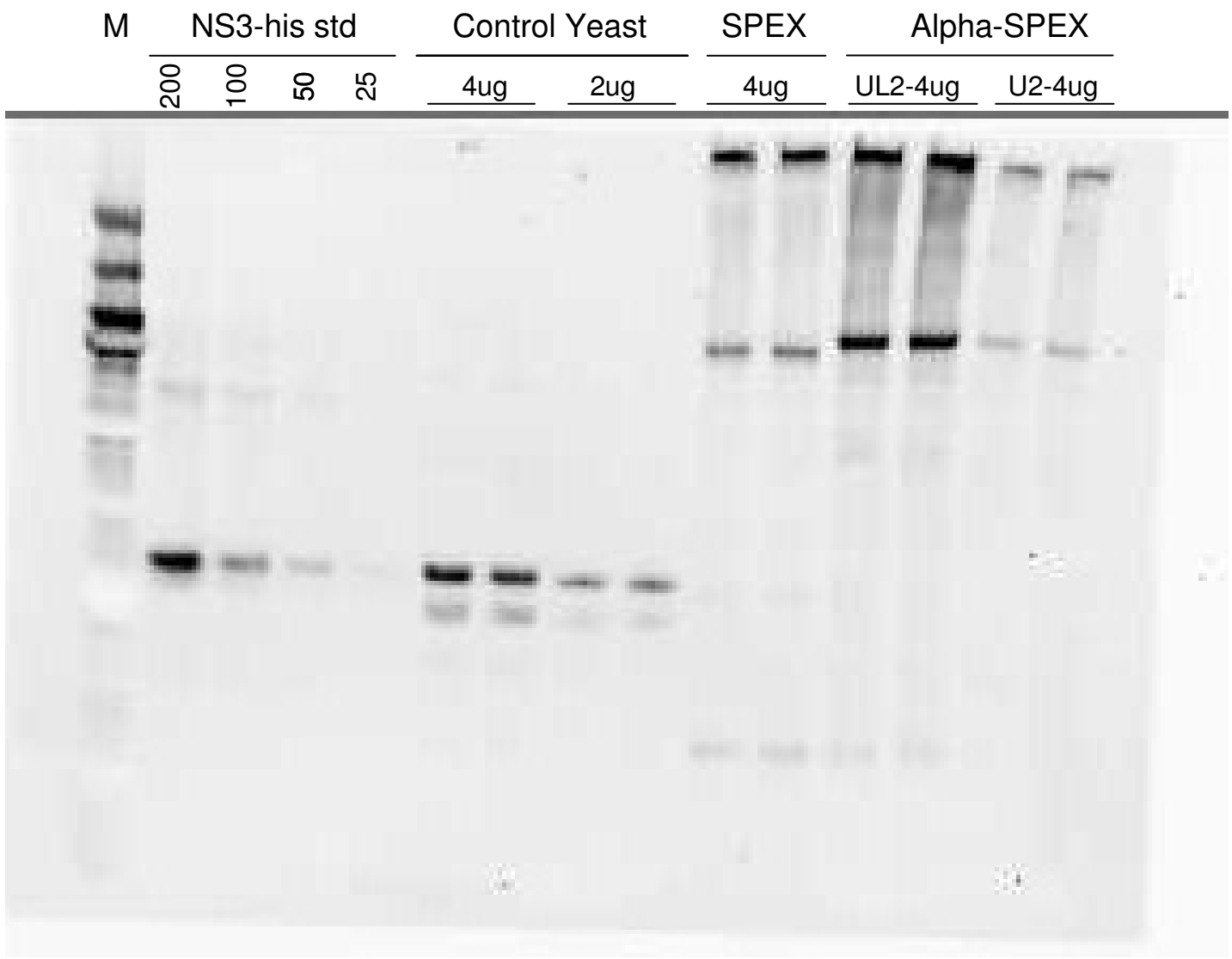

M
NS3-his std
200
100
50
25
Control Yeast
4ug
2ug
SPEX
4ug
Alpha-SPEX
UL2-4ug
U2-4ug

FIG. 20

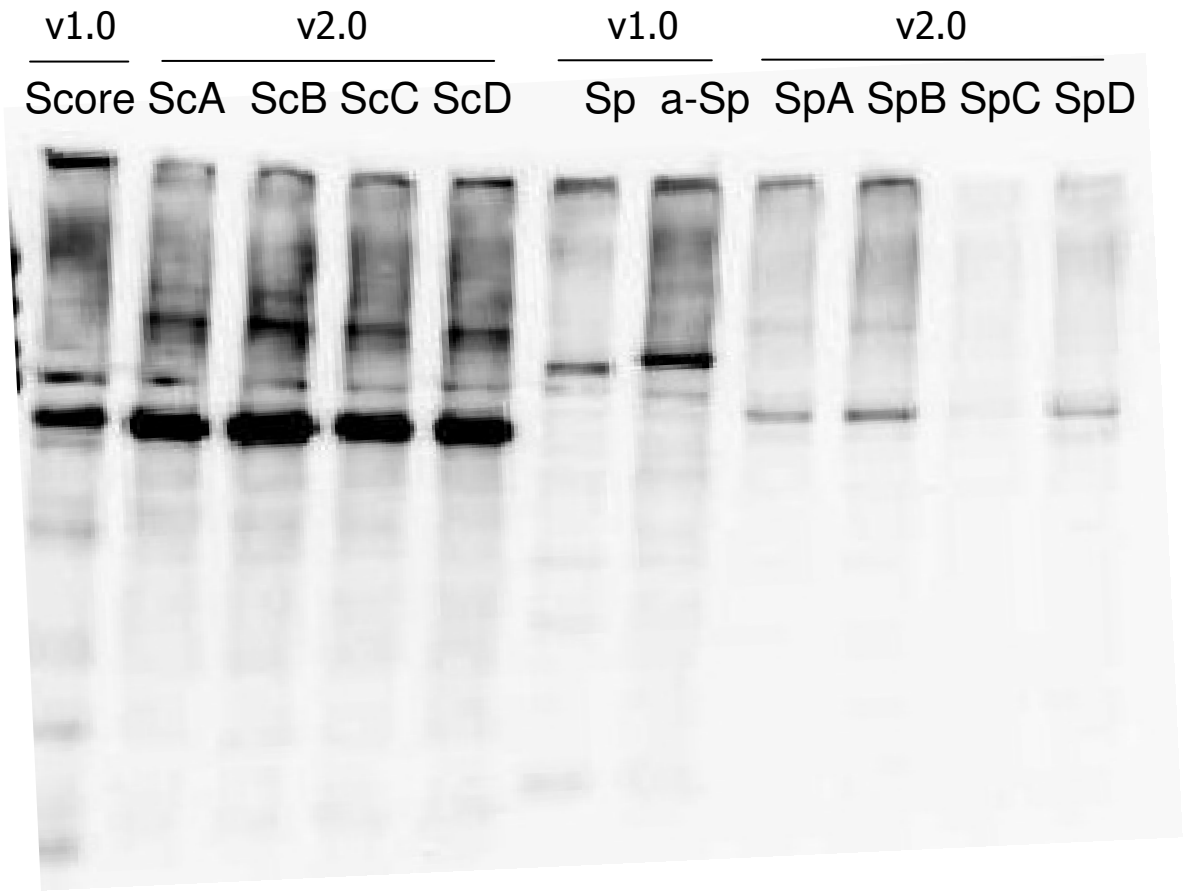


FIG. 21

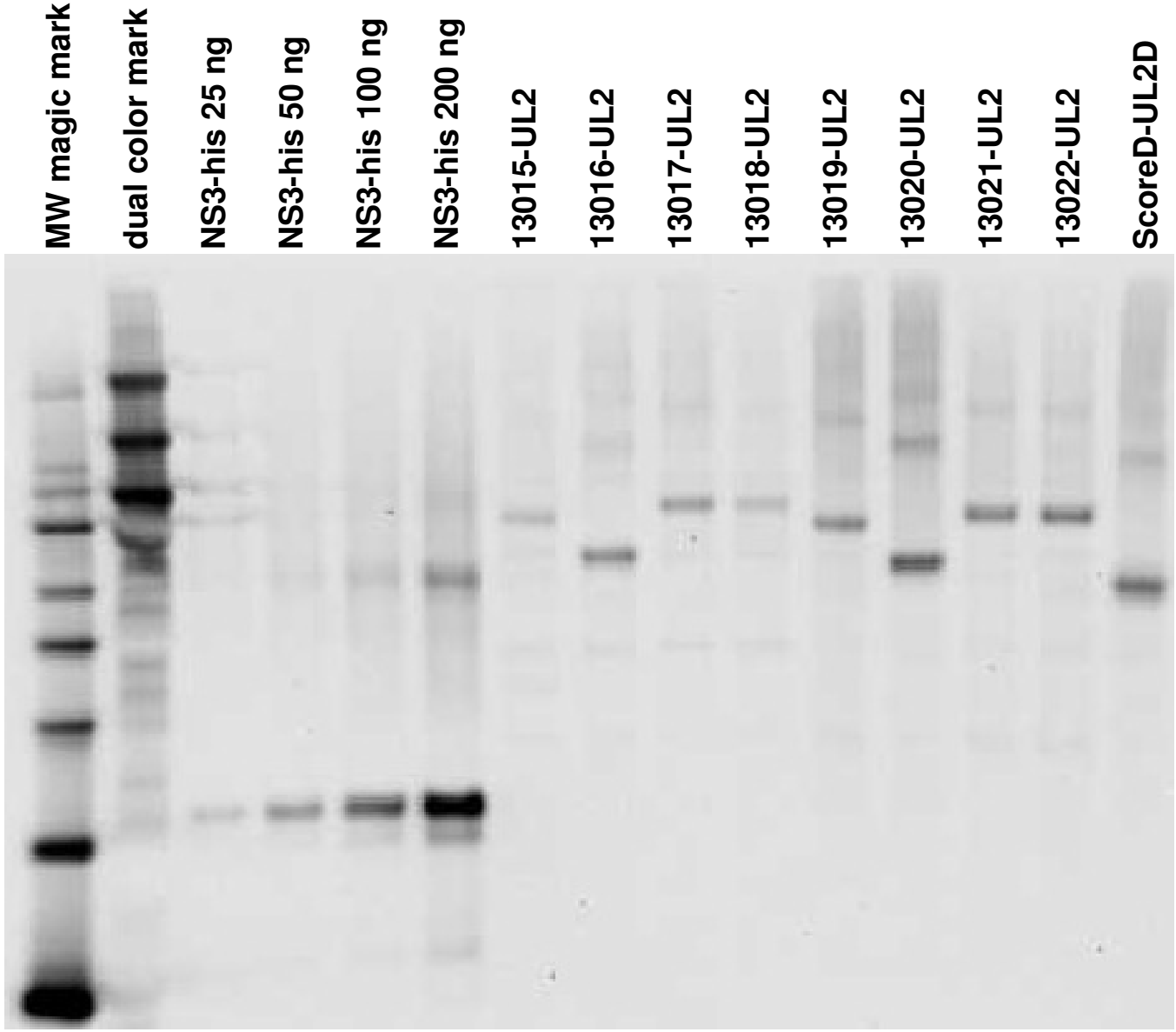

MW magic mark
dual color mark
NS3-his 25 ng
NS3-his 50 ng
NS3-his 100 ng
NS3-his 200 ng
13015-UL2
13016-UL2
13017-UL2
13018-UL2
13019-UL2
13020-UL2
13021-UL2
13022-UL2
ScoreD-UL2D

FIG. 22

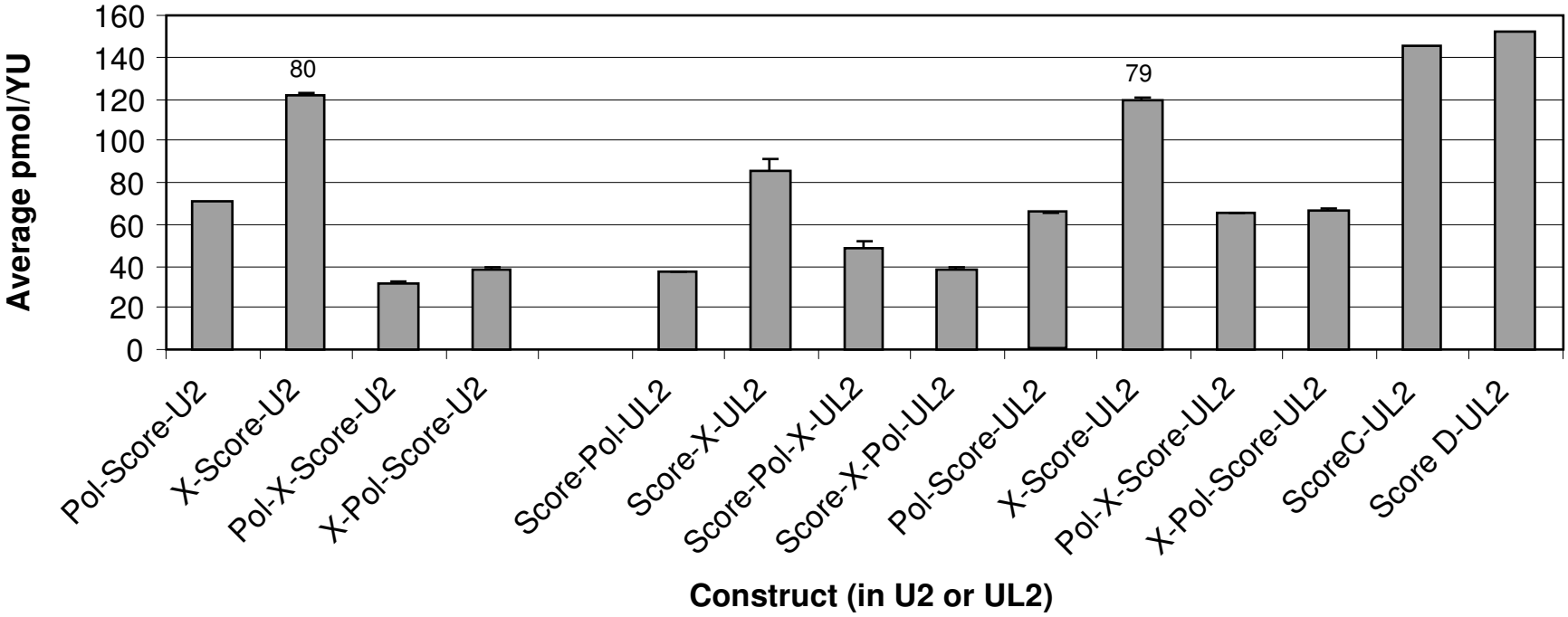

Average pmol/YU
160
140
120
100
80
60
40
20
0
80
79
Pol-Score-U2
X-Score-U2
Pol-X-Score-U2
X-Pol-Score-U2
Score-Pol-UL2
Score-X-UL2
Score-Pol-X-UL2
Score-X-Pol-UL2
Pol-Score-UL2
X-Score-UL2
Pol-X-Score-UL2
X-Pol-Score-UL2
ScoreC-UL2
Score D-UL2
Construct (in U2 or UL2)

FIG. 23

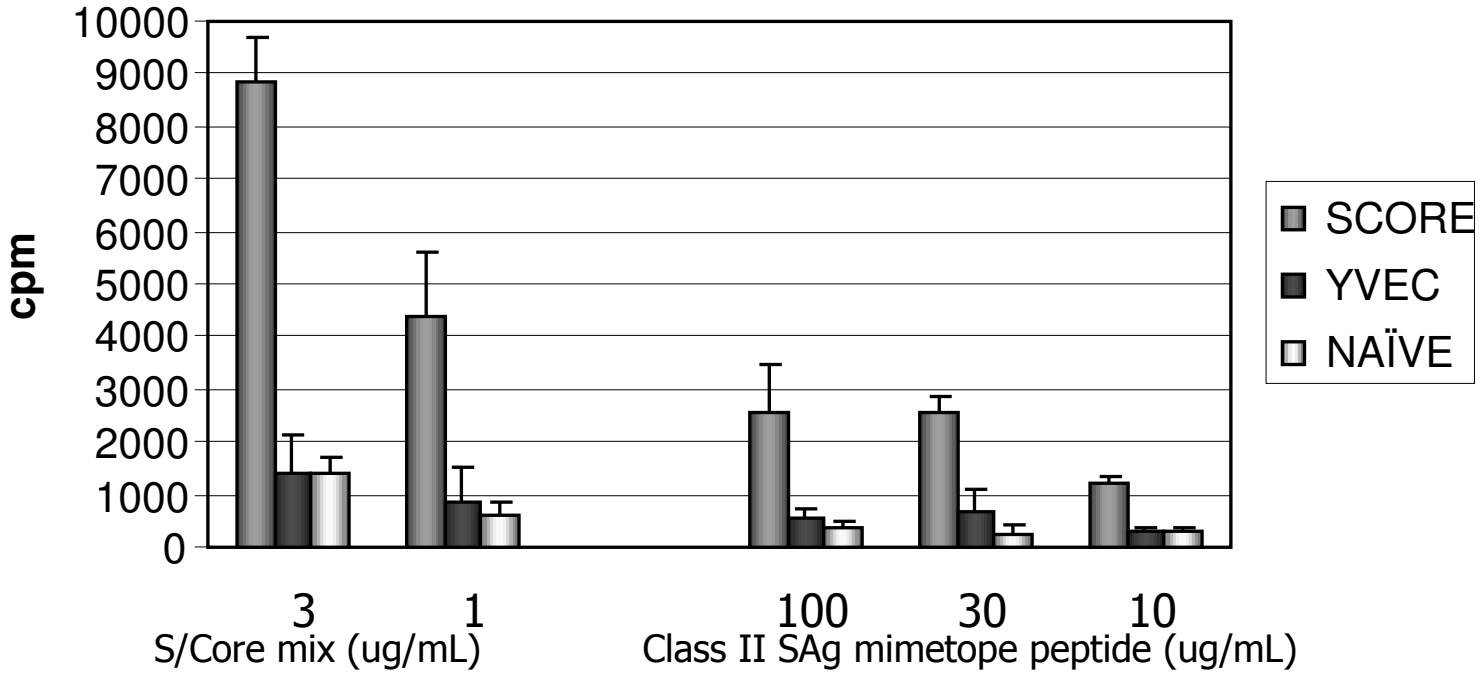

10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
cpm
SCORE
YVEC
NAÏVE
3
1
100
30
10
S/Core mix (ug/mL)
Class II SAg mimetope peptide (ug/mL)

FIG. 24

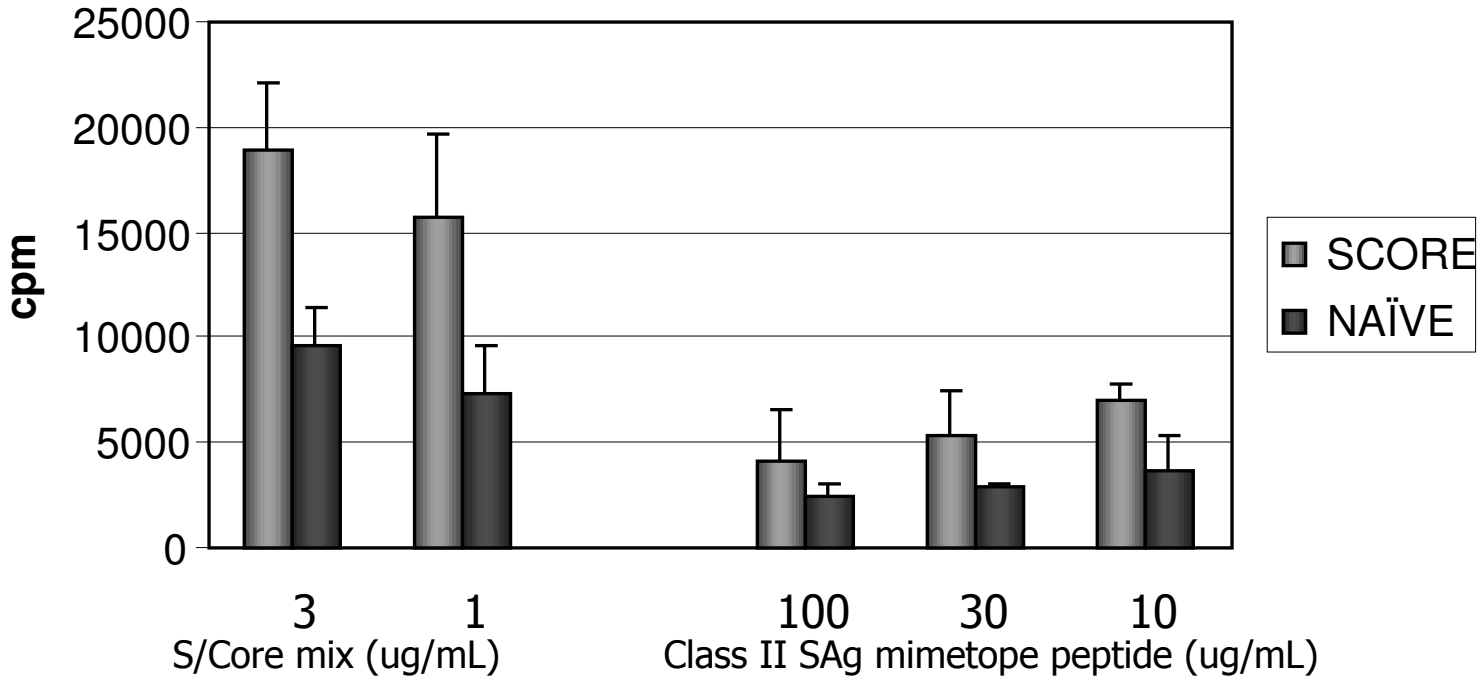

25000
20000
15000
10000
5000
0
cpm
SCORE
NAÏVE
3
1
100
30
10
S/Core mix (ug/mL)
Class II SAg mimetope peptide (ug/mL)

FIG. 25

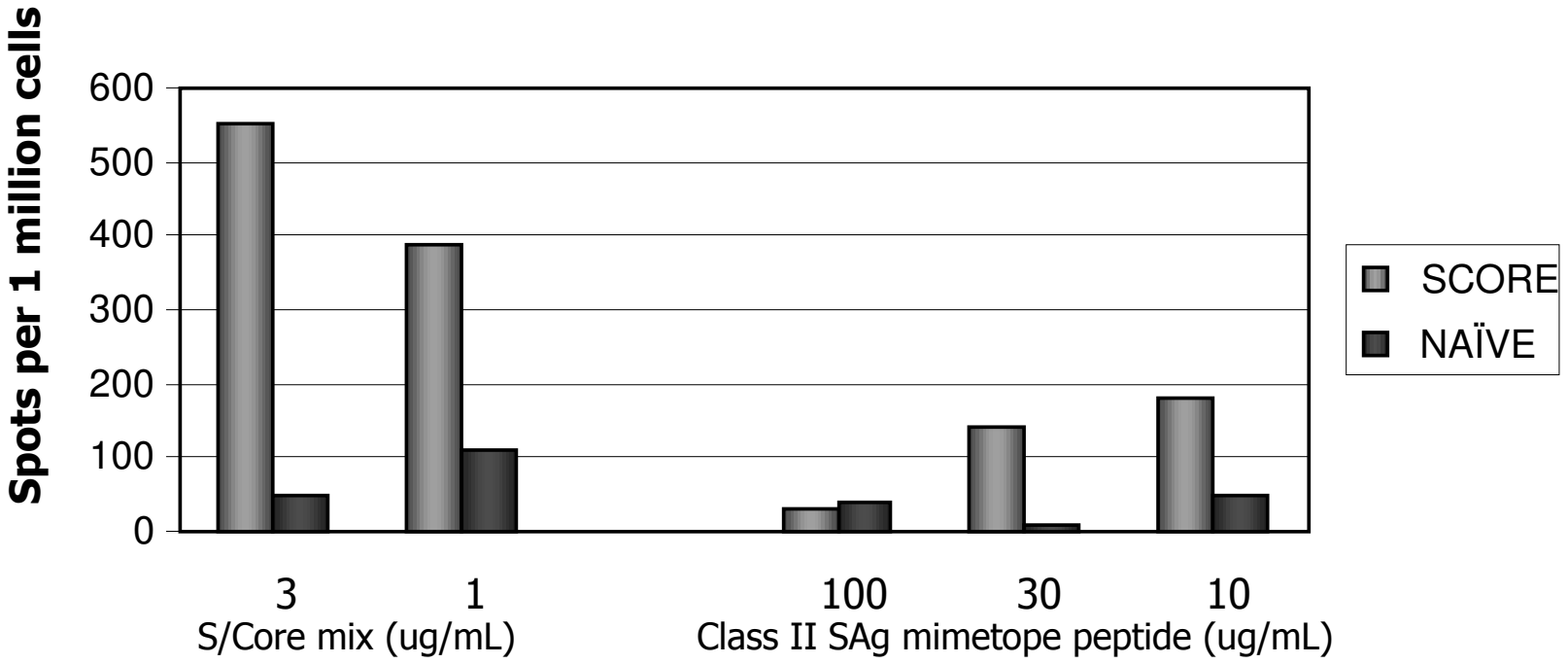

Spots per 1 million cells
600
500
400
300
200
100
0
3
1
100
30
10
S/Core mix (ug/mL)
Class II SAg mimetope peptide (ug/mL)
SCORE
NAÏVE

FIG. 26

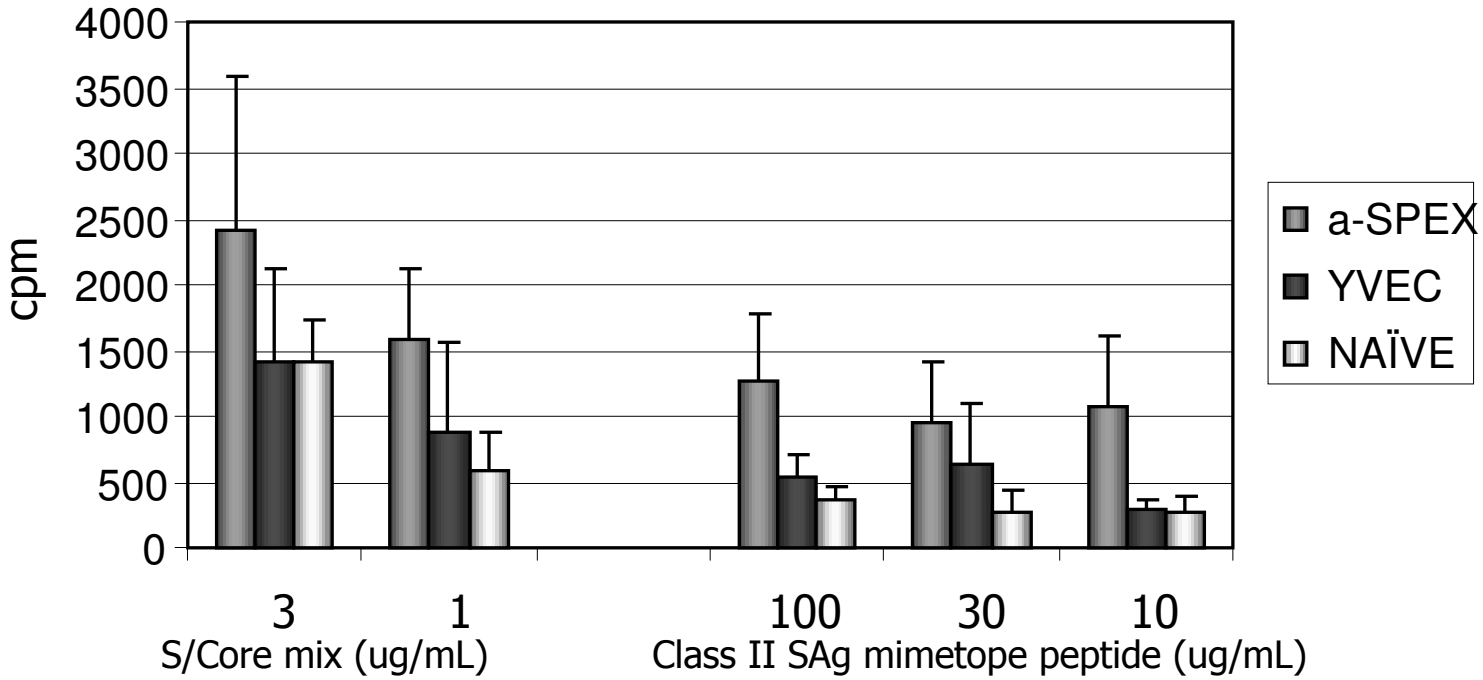

4000
3500
3000
2500
2000
1500
1000
500
0
cpm
3
1
100
30
10
S/Core mix (ug/mL)
Class II SAg mimetope peptide (ug/mL)
a-SPEX
YVEC
NAÏVE

FIG. 27

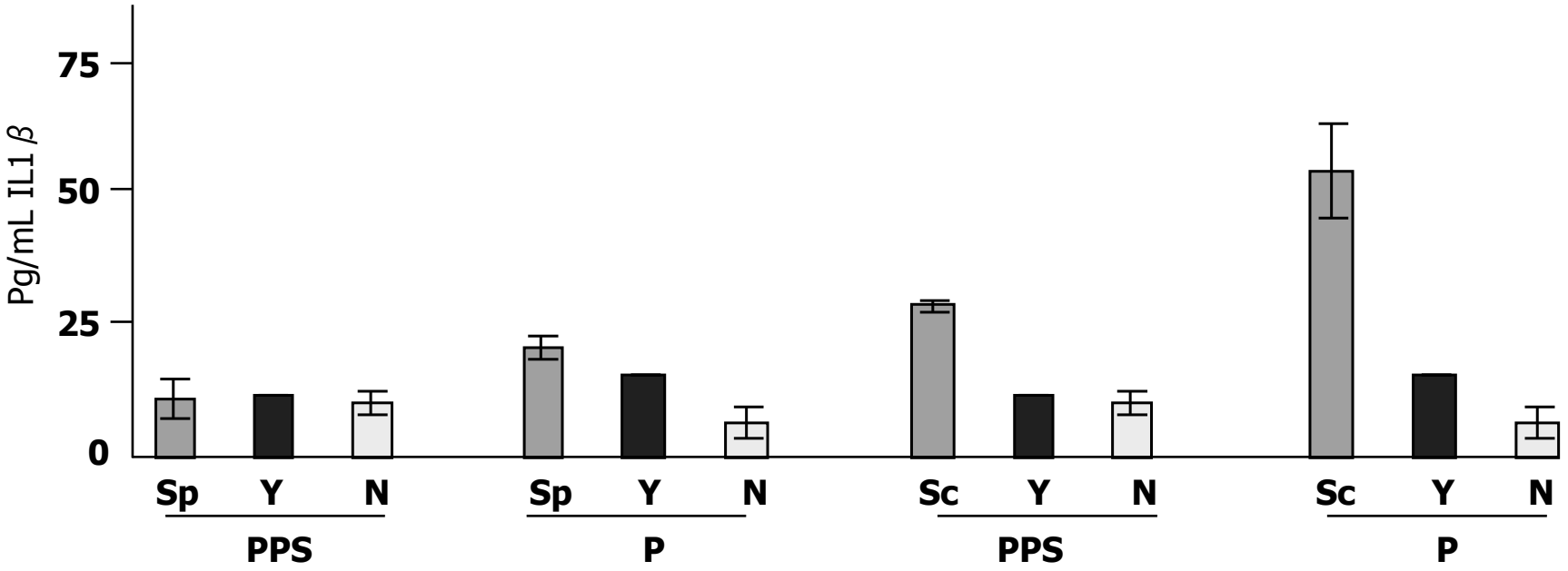
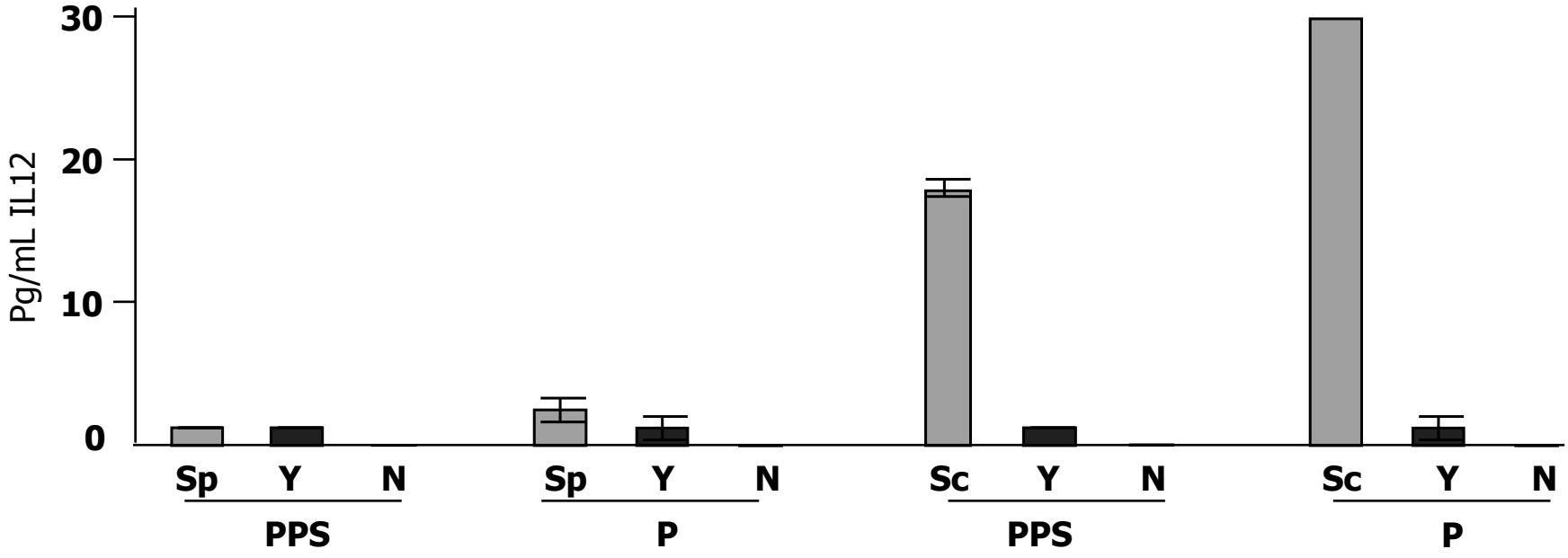


FIG. 28



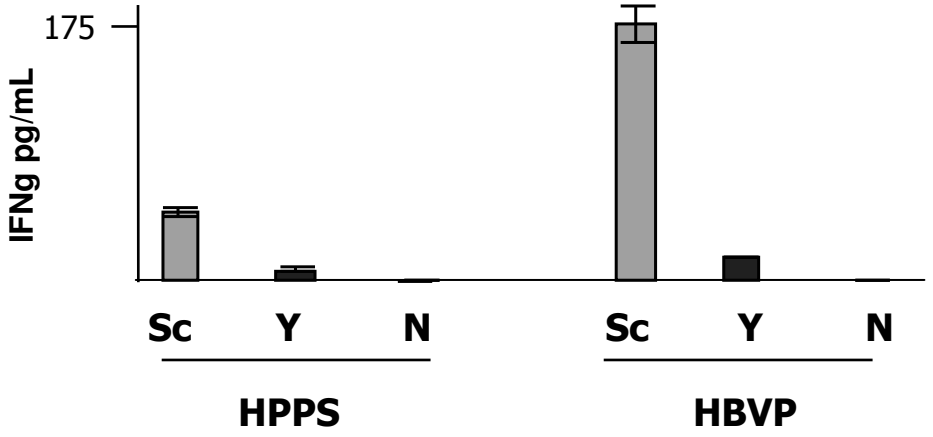


FIG. 29A

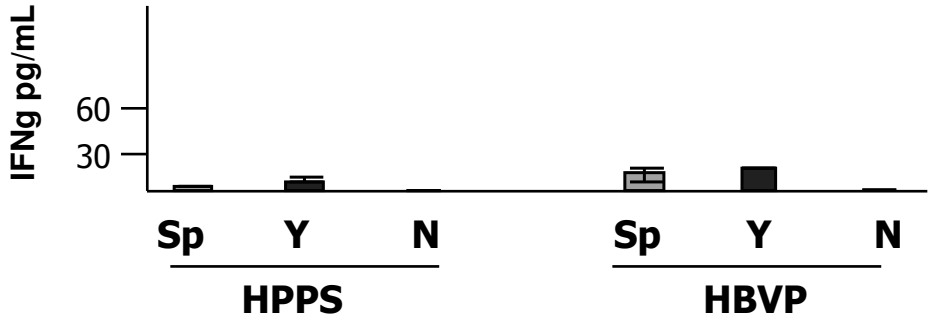


FIG. 29B

FIG. 30A

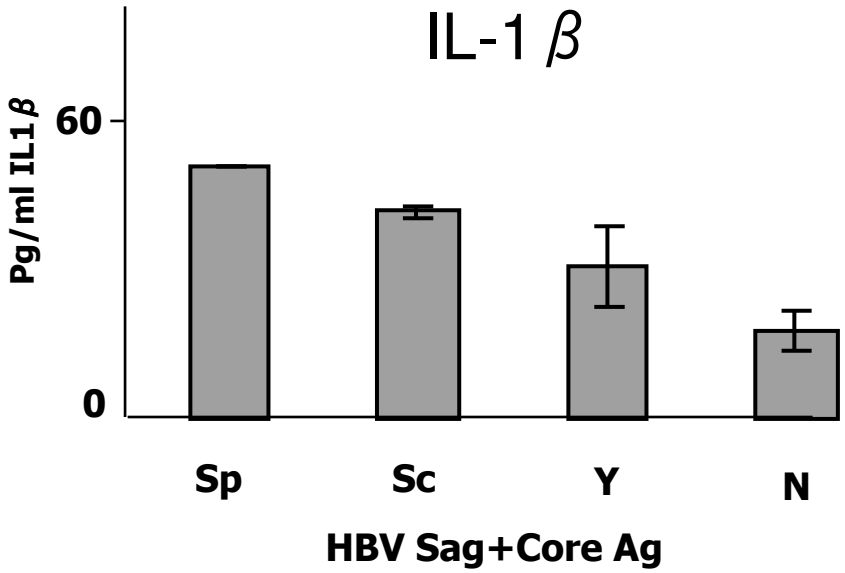


FIG. 30B

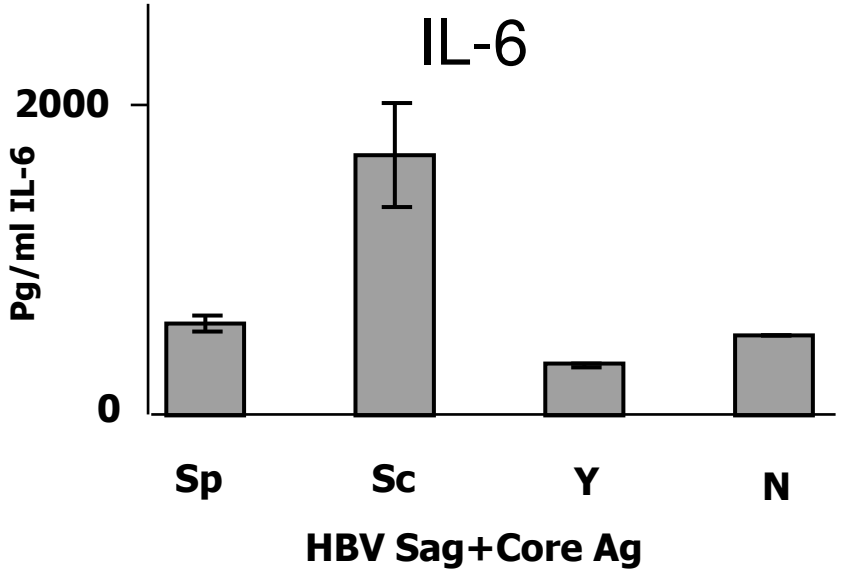


FIG. 30C

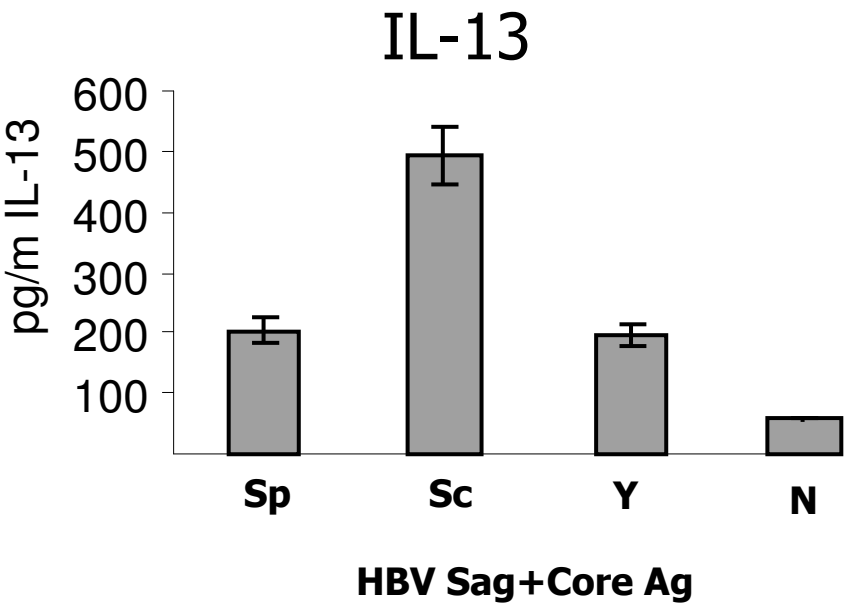


FIG. 30D

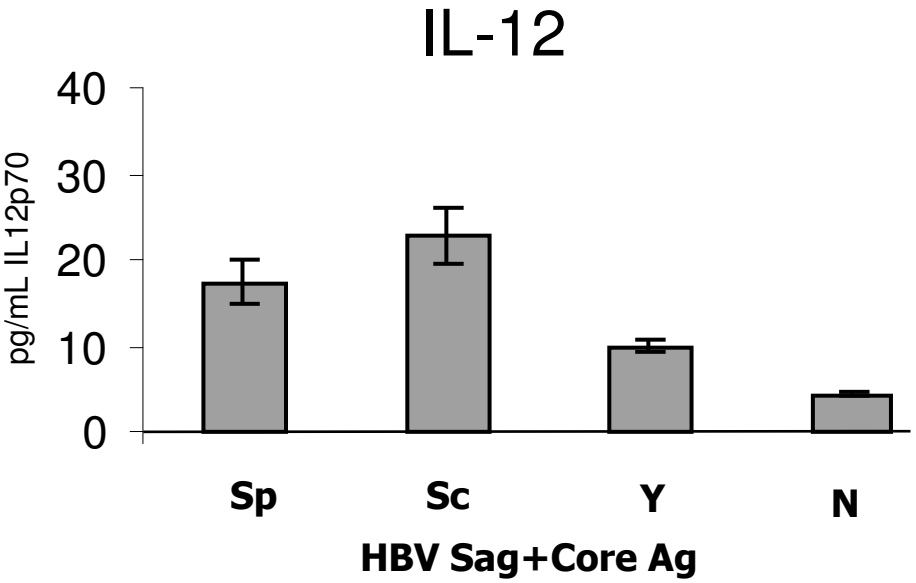


FIG. 31

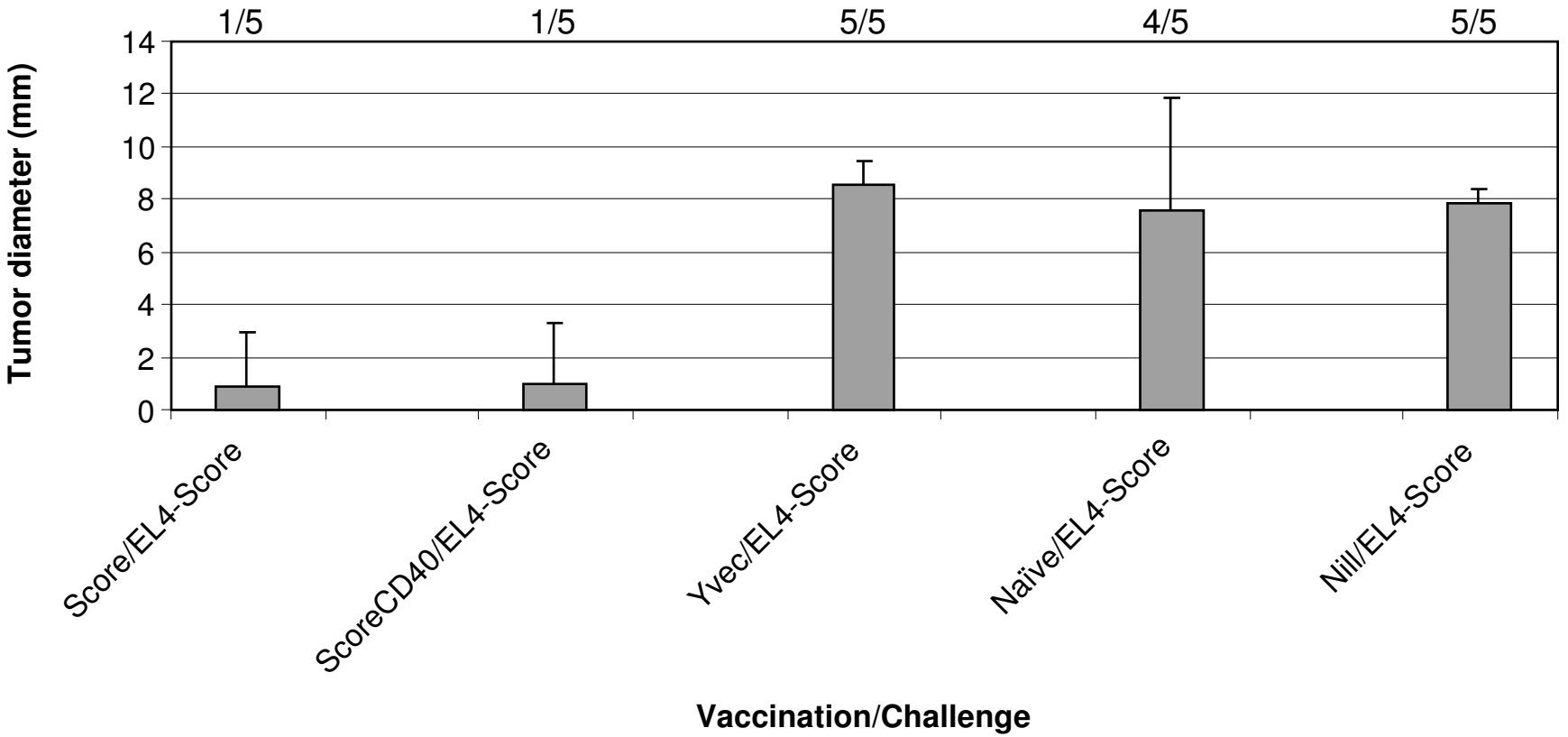

1/5
1/5
5/5
4/5
5/5
14
12
10
8
6
4
2
0
Tumor diameter (mm)
Score/EL4-Score
ScoreCD40/EL4-Score
Yvec/EL4-Score
Naïve/EL4-Score
Nill/EL4-Score
Vaccination/Challenge

FIG. 32

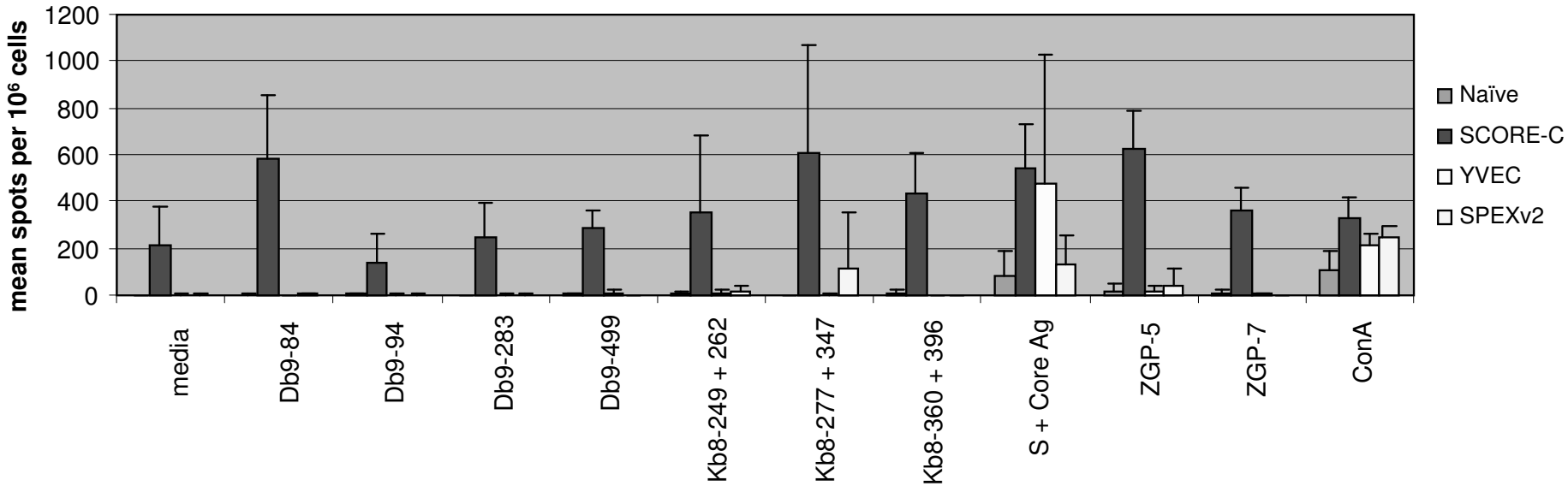

mean spots per 10^6 cells
1200
1000
800
600
400
200
0
media
Db9-84
Db9-94
Db9-283
Db9-499
Kb8-249 + 262
Kb8-277 + 347
Kb8-360 + 396
S + Core Ag
ZGP-5
ZGP-7
ConA
Naïve
SCORE-C
YVEC
SPEXv2

FIG. 33

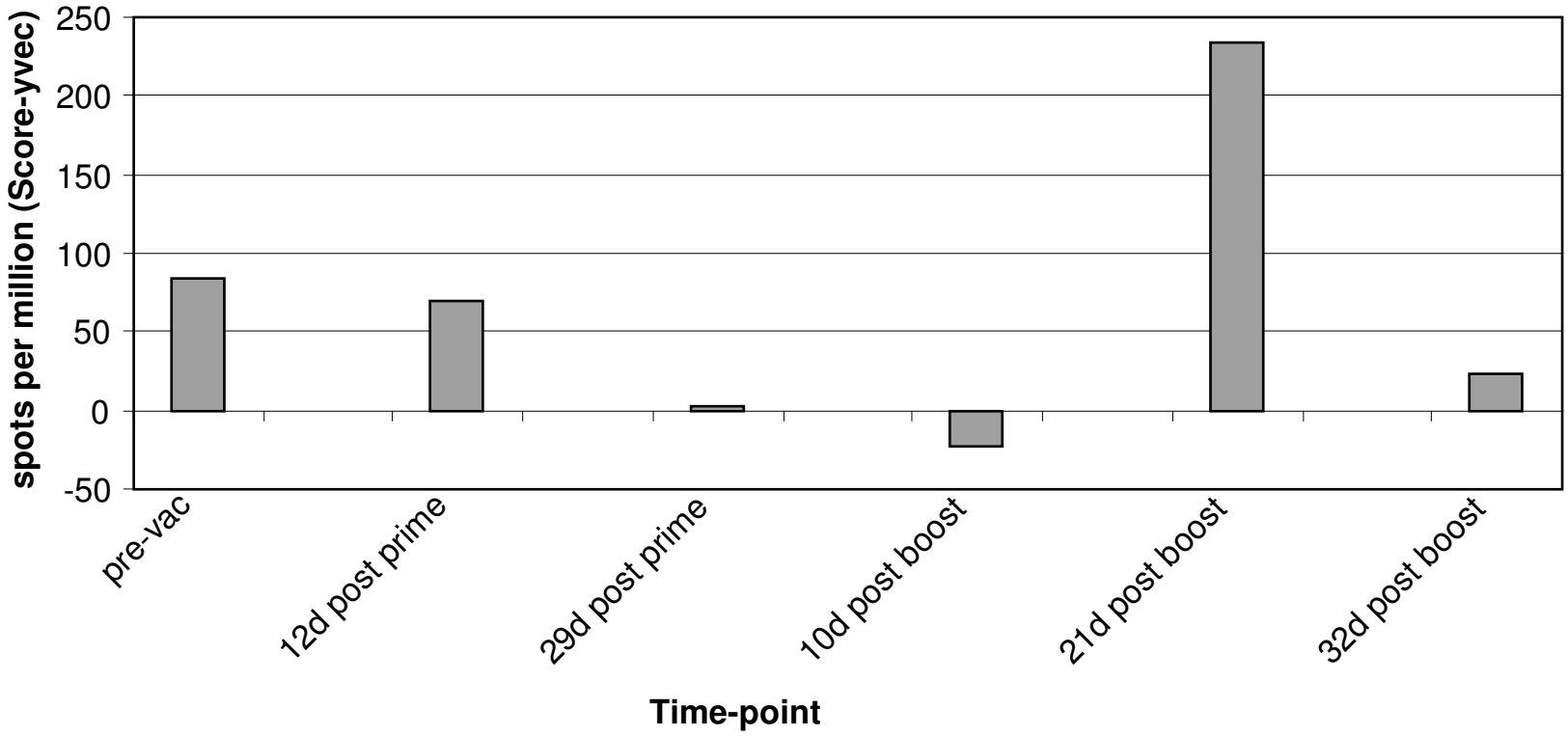

spots per million (Score-yvec)
250
200
150
100
50
0
-50
pre-vac
12d post prime
29d post prime
10d post boost
21d post boost
32d post boost
Time-point

FIG. 34

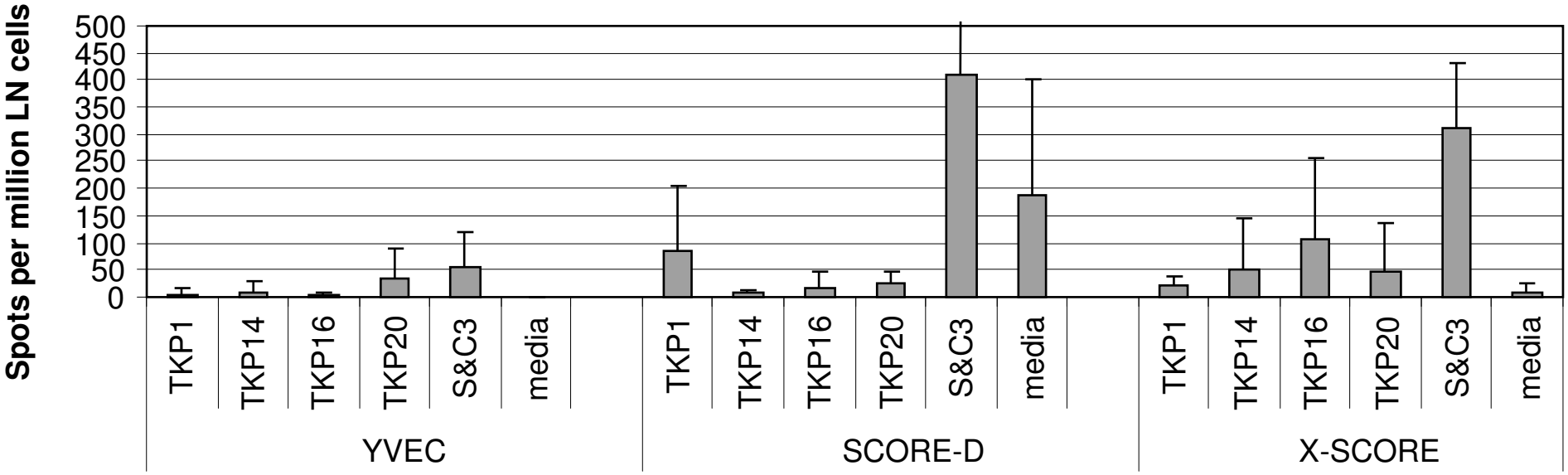

Spots per million LN cells
500
450
400
350
300
250
200
150
100
50
0
TKP1
TKP14
TKP16
TKP20
S&C3
media
YVEC
SCORE-D
X-SCORE

FIG. 35

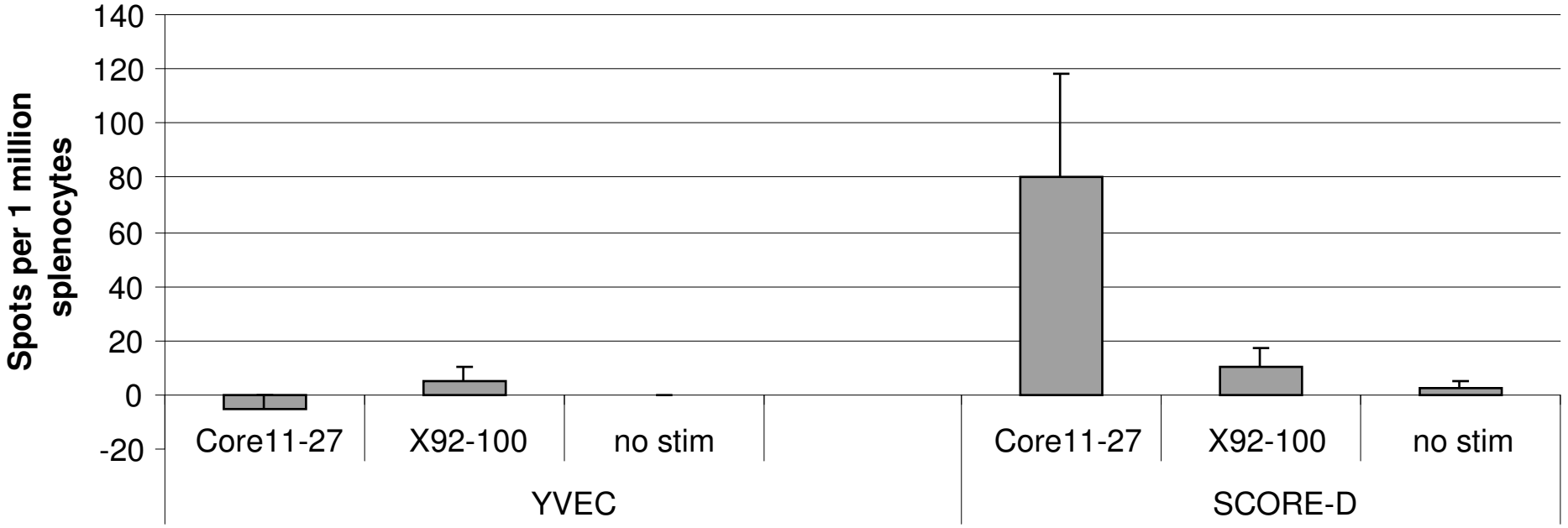

Spots per 1 million splenocytes
140
120
100
80
60
40
20
0
-20
Core11-27
X92-100
no stim
Core11-27
X92-100
no stim
YVEC
SCORE-D

FIG. 36

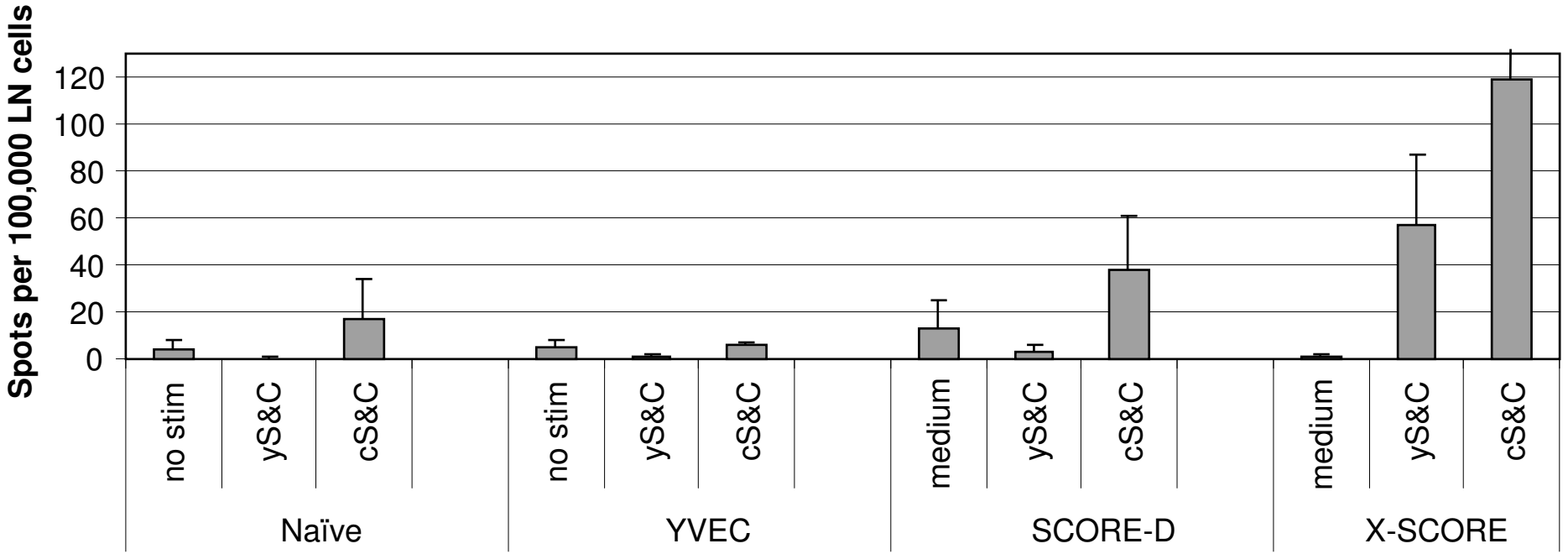

Spots per 100,000 LN cells
120
100
80
60
40
20
0
no stim
yS&C
cS&C
no stim
yS&C
cS&C
medium
yS&C
cS&C
medium
yS&C
cS&C
Naïve
YVEC
SCORE-D
X-SCORE

FIG. 37

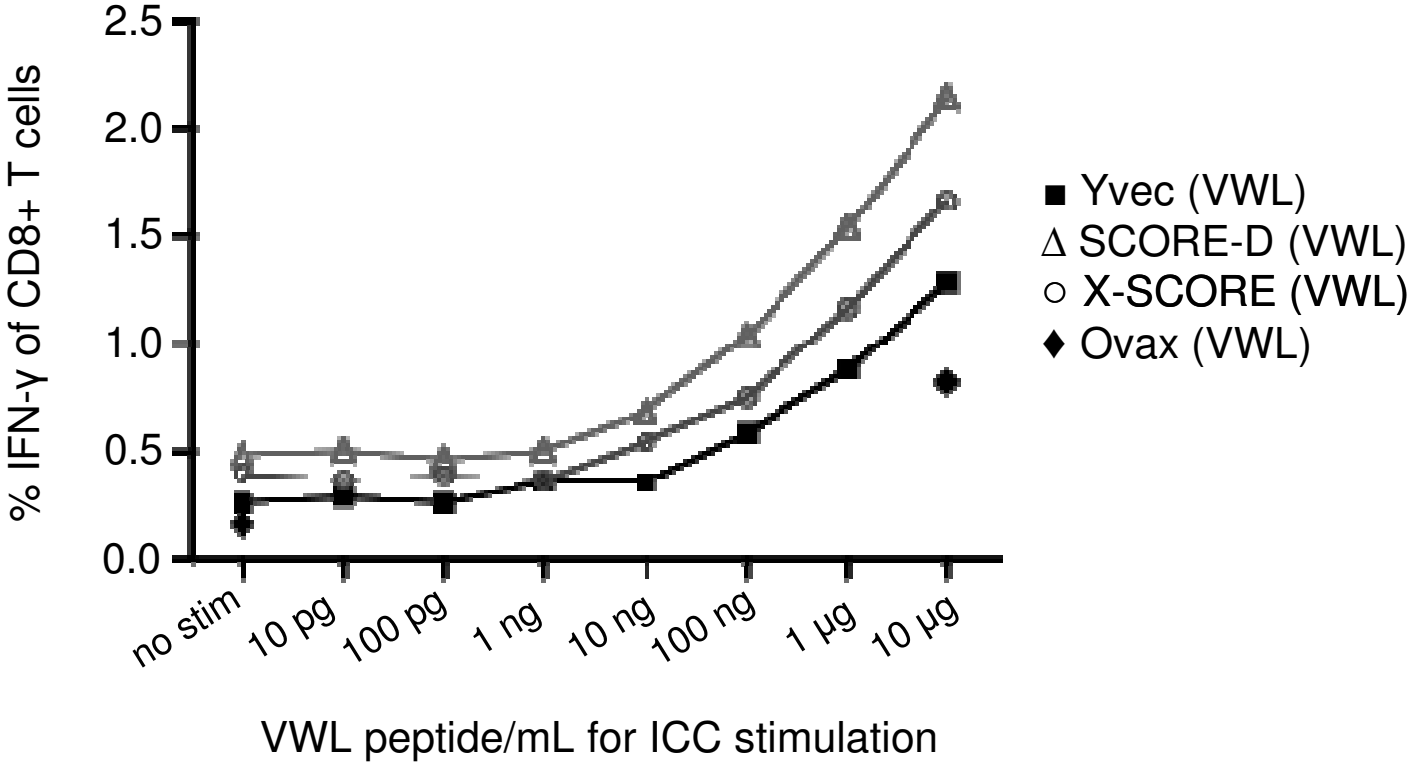
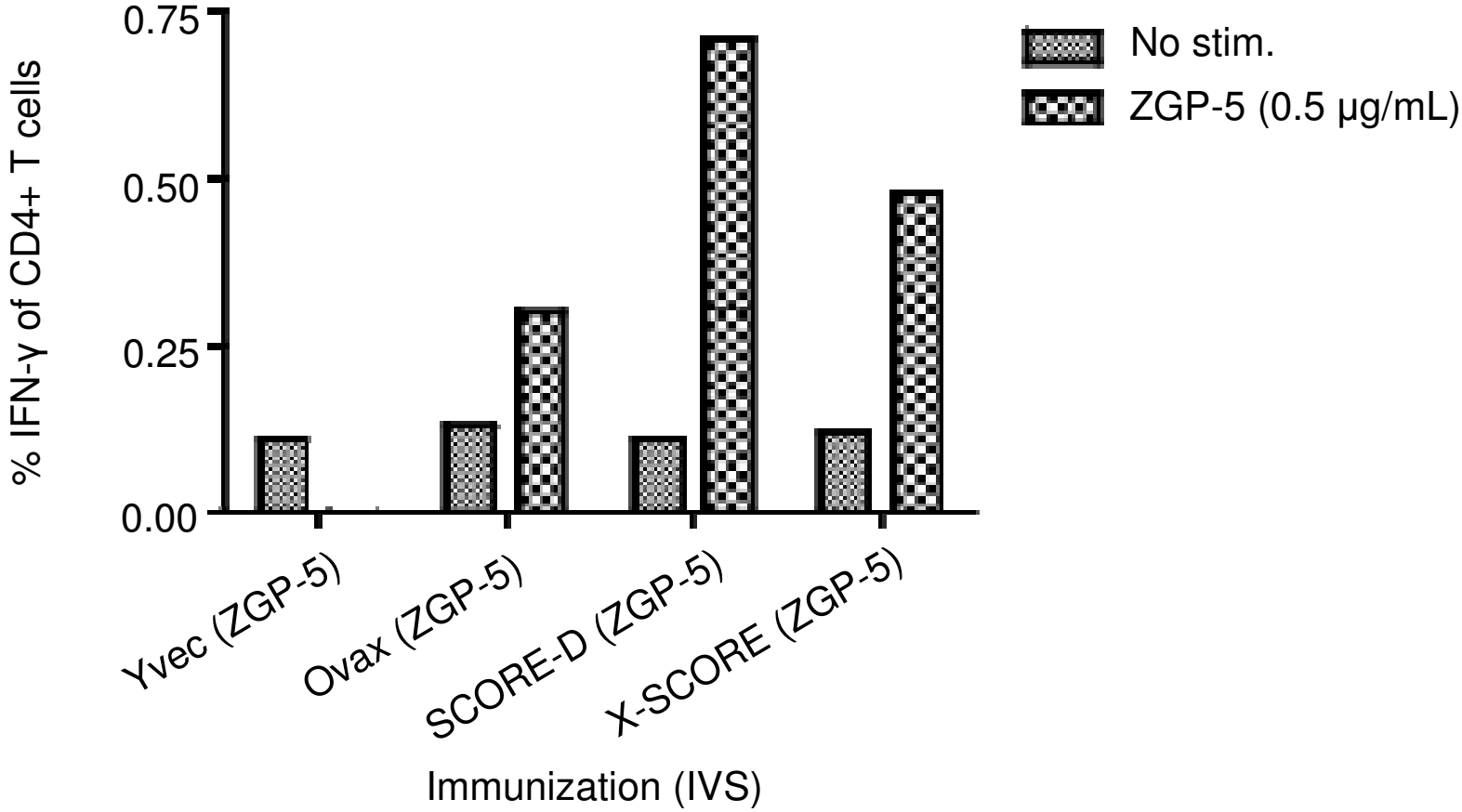

2.5
2.0
1.5
1.0
0.5
0.0
% IFN-γ of CD8+ T cells
no stim
10 pg
100 pg
1 ng
10 ng
100 ng
1 µg
10 µg
VWL peptide/mL for ICC stimulation
Yvec (VWL)
SCORE-D (VWL)
X-SCORE (VWL)
Ovax (VWL)

FIG. 38


0.75
0.50
0.25
0.00
% IFN-γ of CD4+ T cells
No stim.
ZGP-5 (0.5 µg/mL)
Yvec (ZGP-5)
Ovax (ZGP-5)
SCORE-D (ZGP-5)
X-SCORE (ZGP-5)
Immunization (IVS)