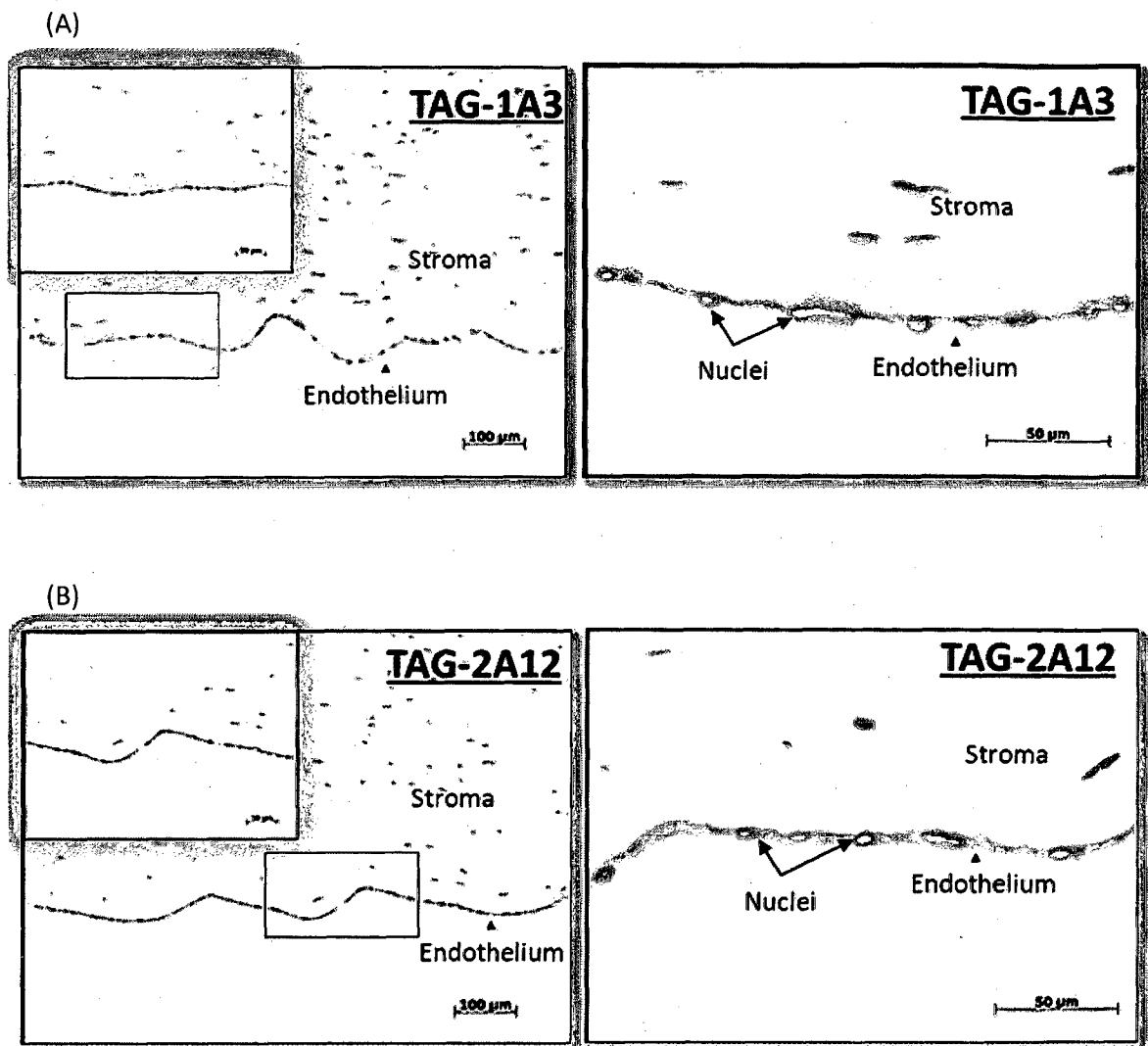


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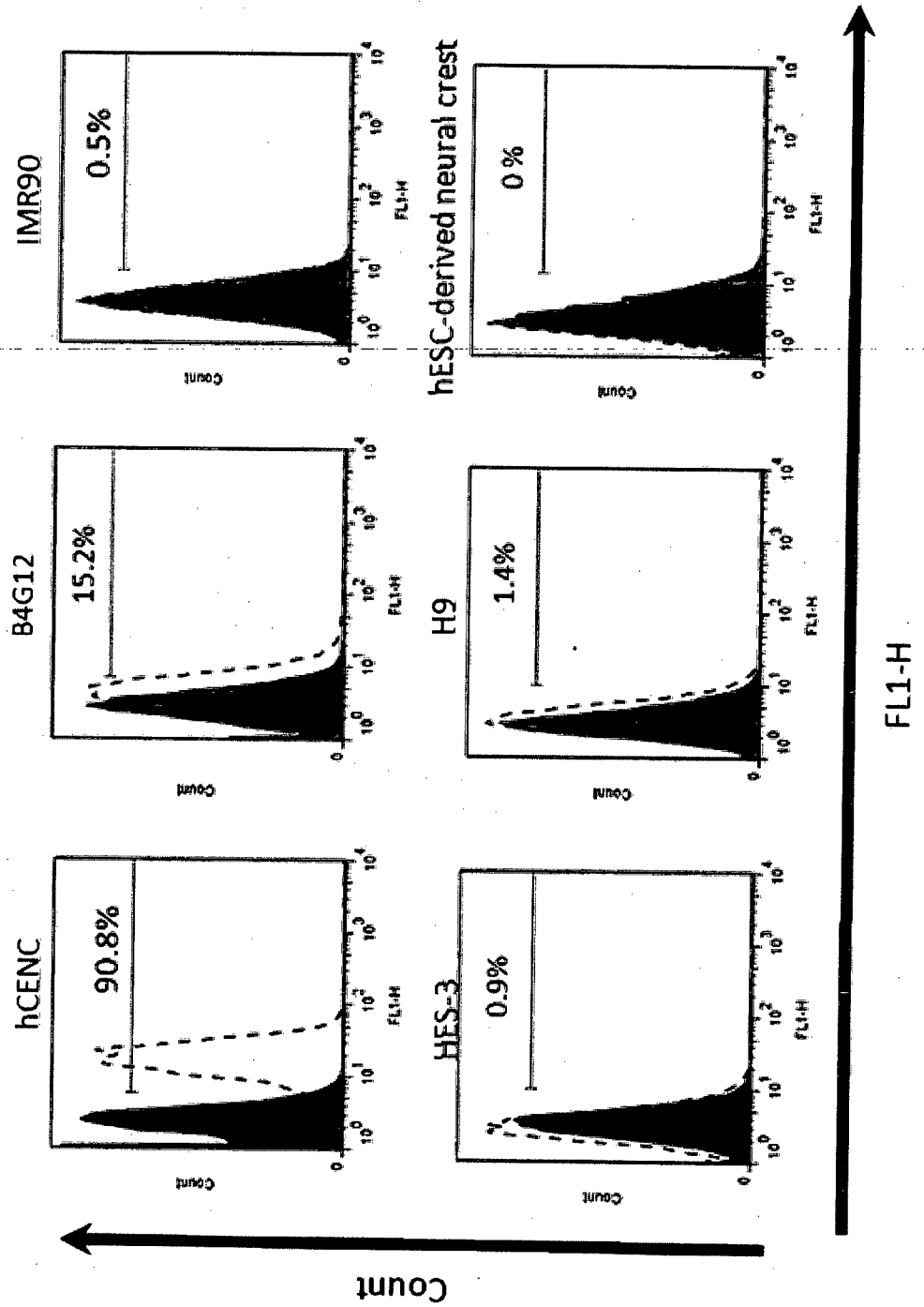
FIG. 1



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FIG. 2

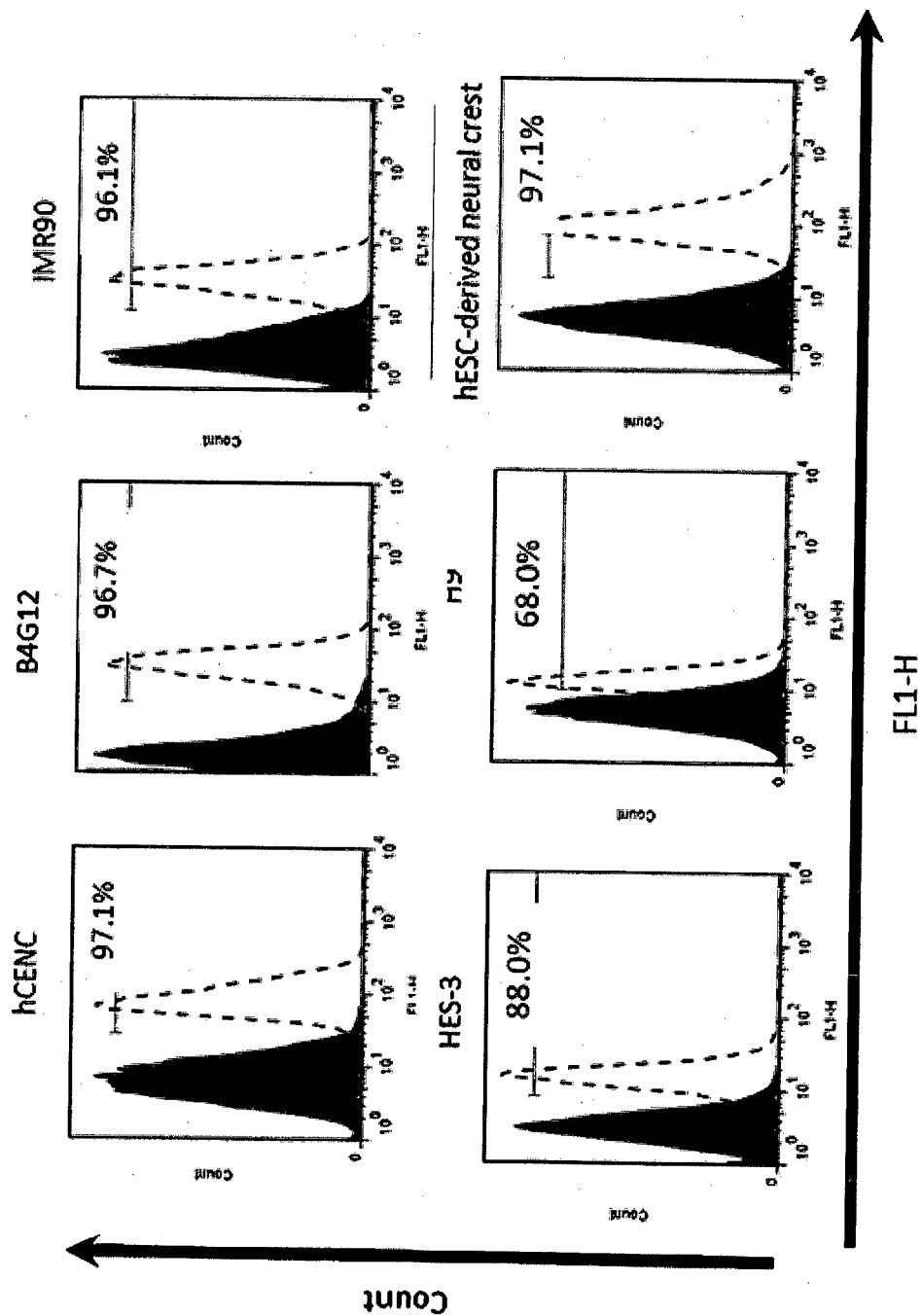
(A) TAG-2A12



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FIG. 2 continued

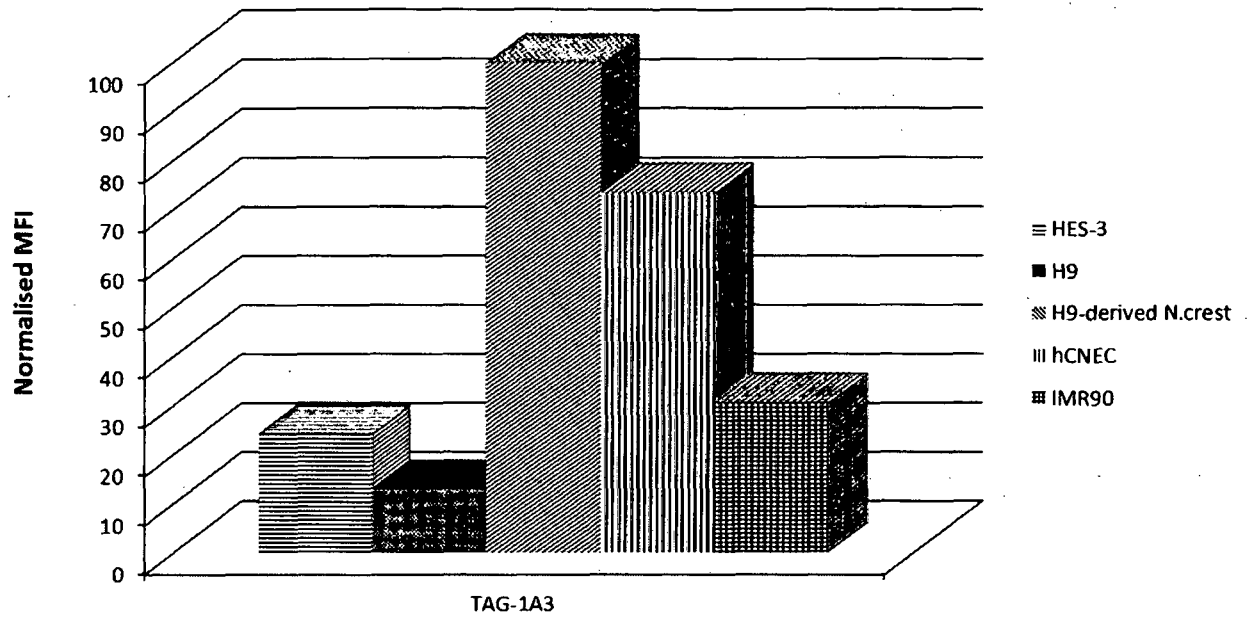
(B) TAG-1A3



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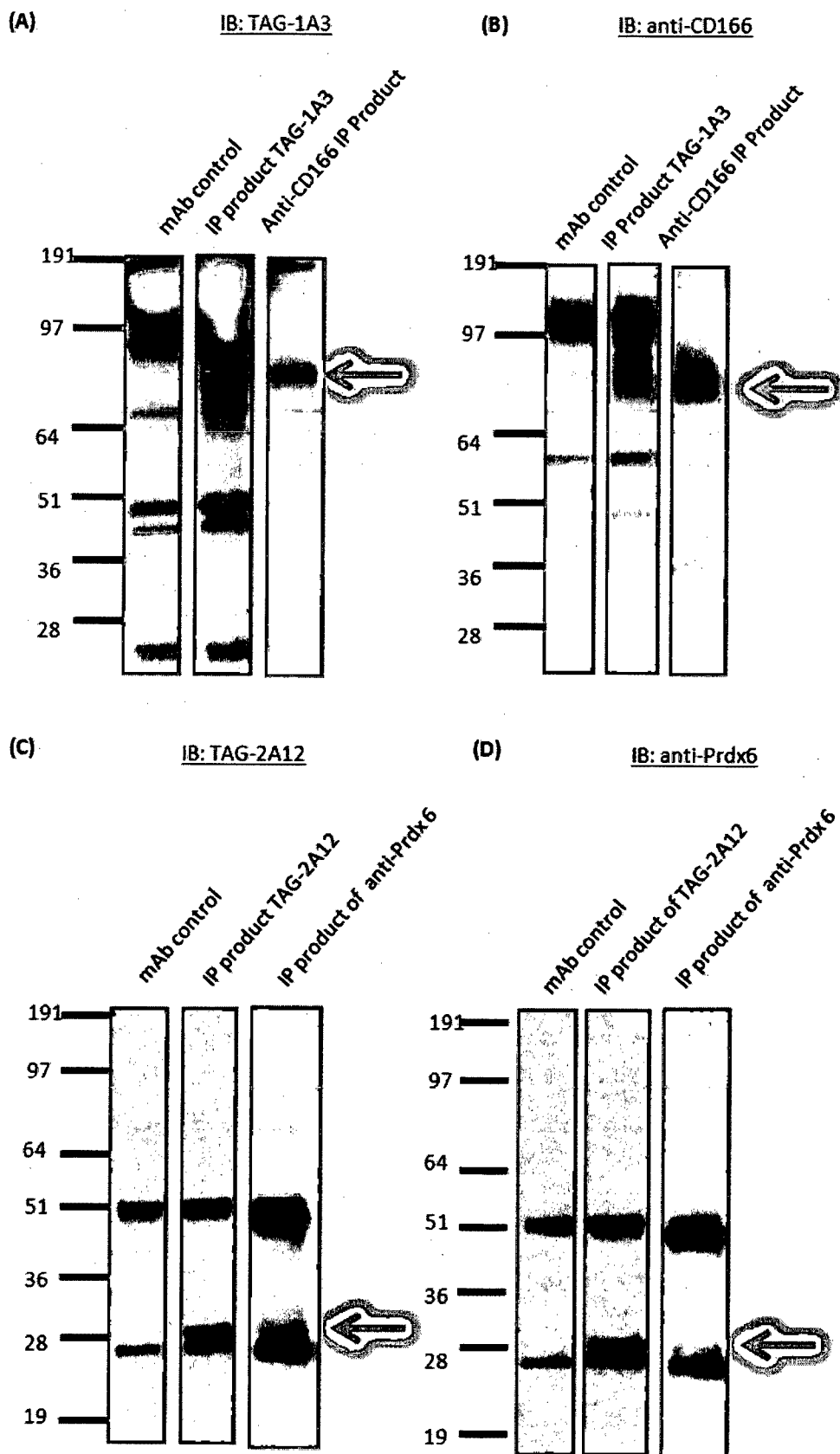
FIG. 2 continued

(c)



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FIG. 3



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FIG. 4

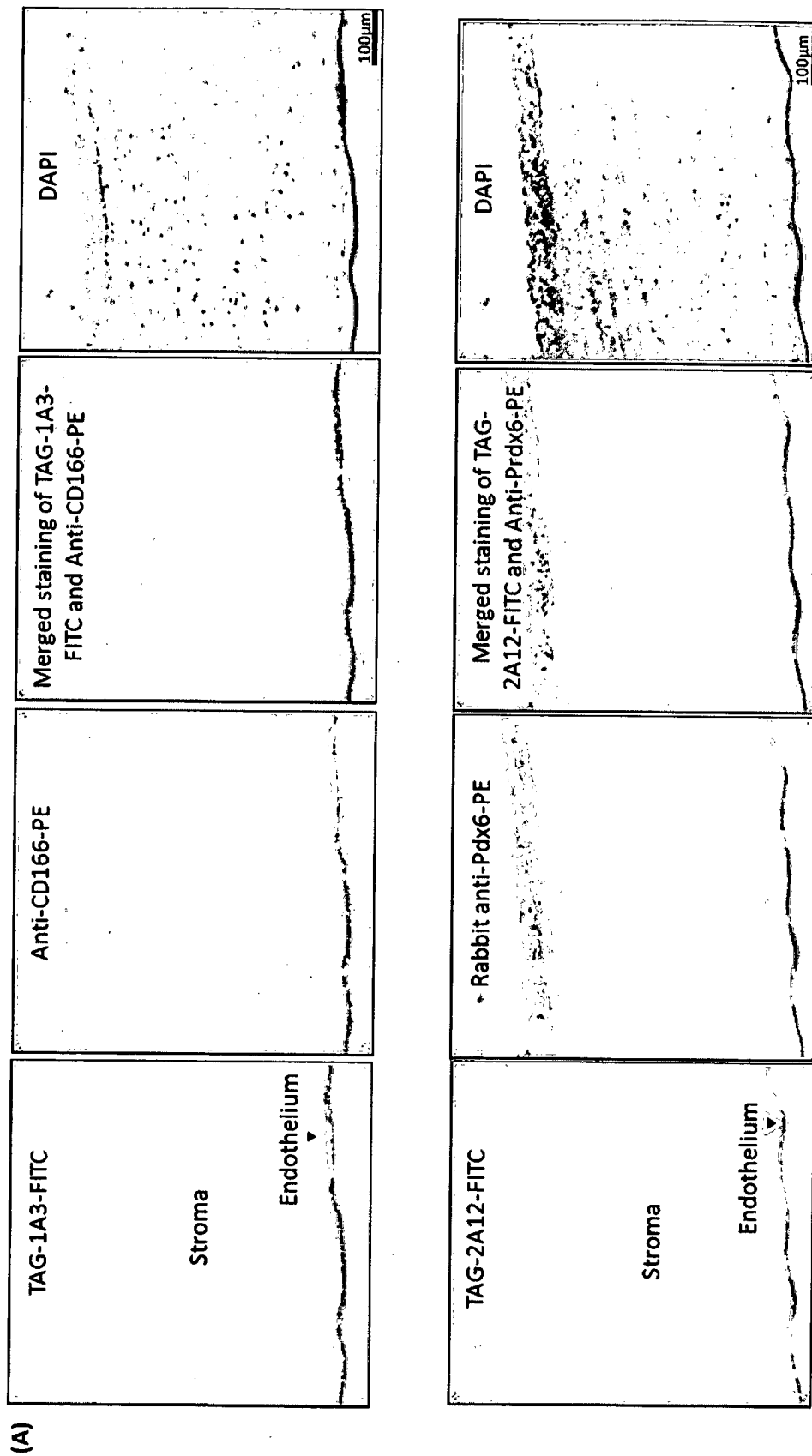
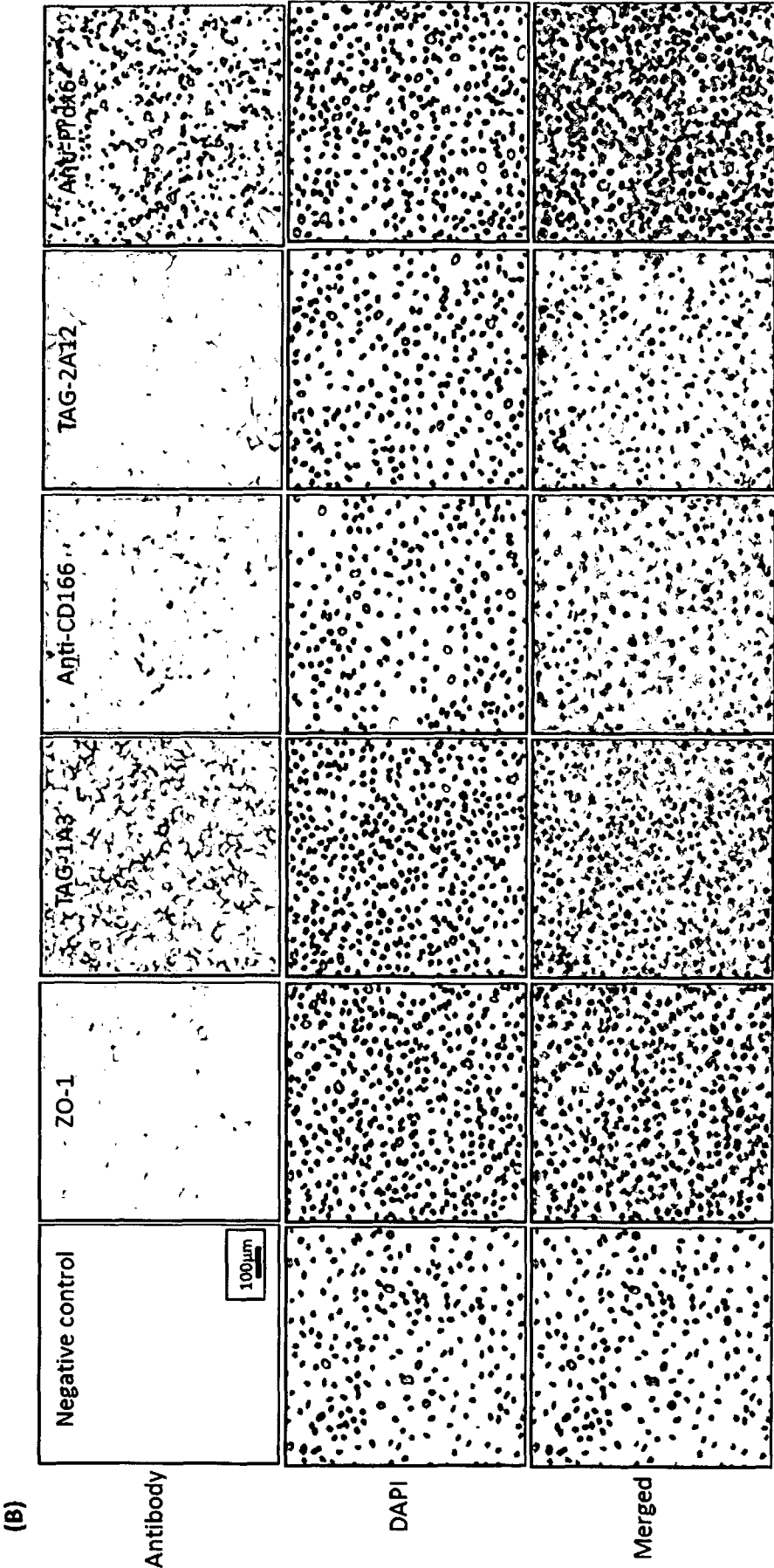
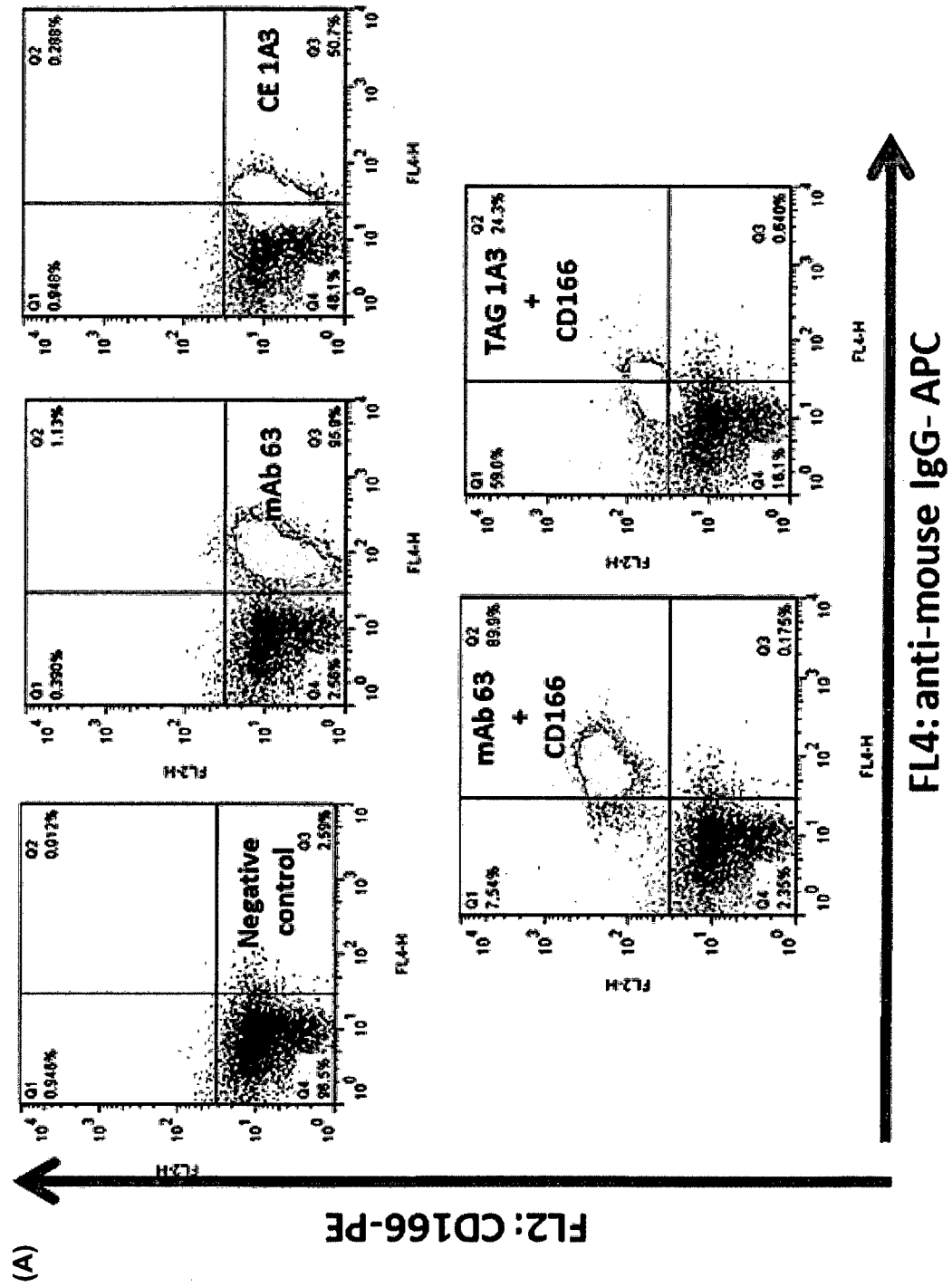


FIG. 4 continued



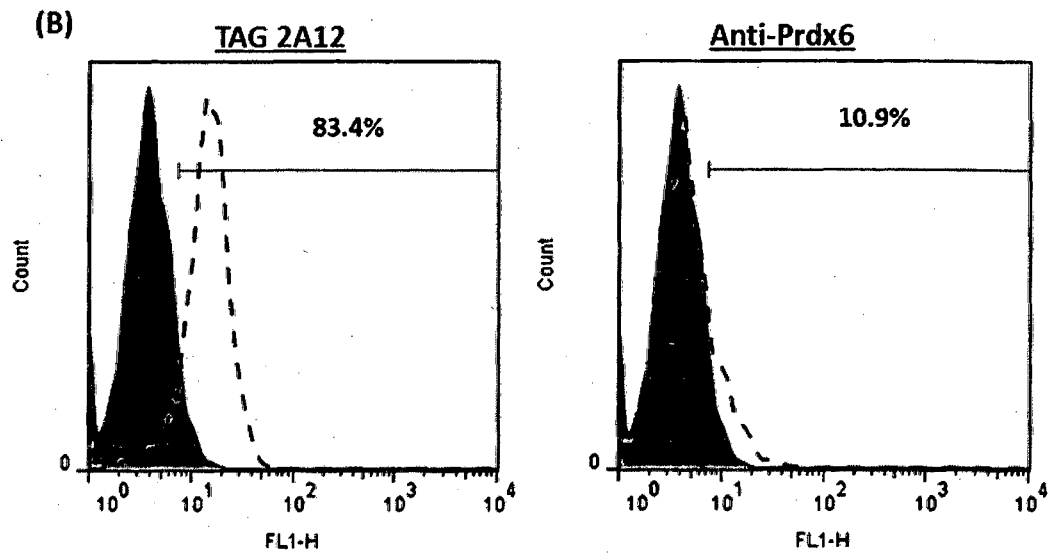
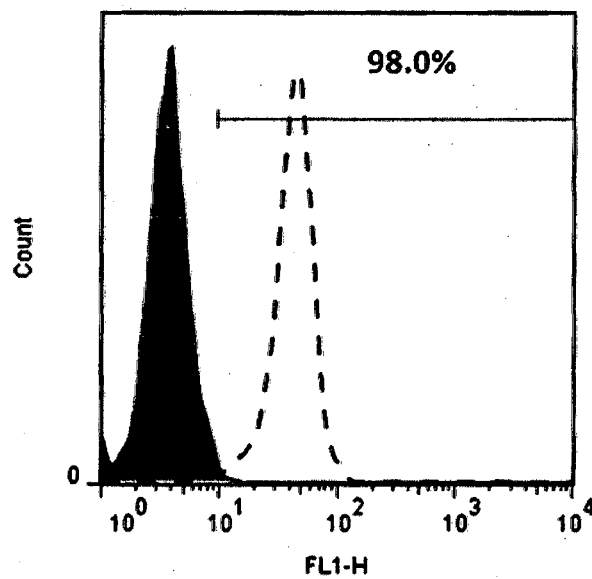
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FIG. 5



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FIG. 5 continued

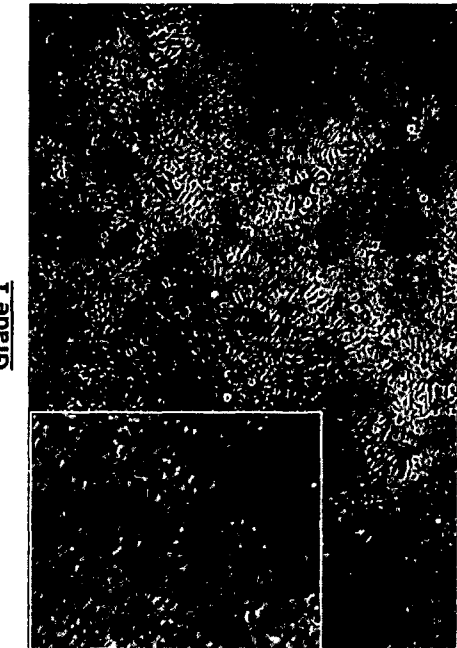
Surface staining (Live)Intracellular staining (Fix and Perm)Anti- Prdx6

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FIG.6

Good "Cobblestone-like" Morphology

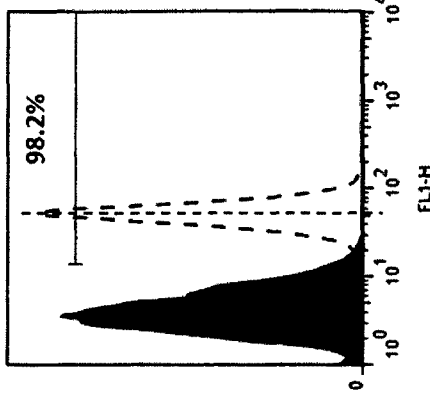
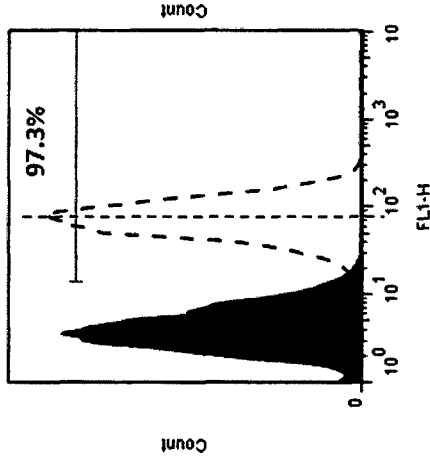
Grade 1



(A)

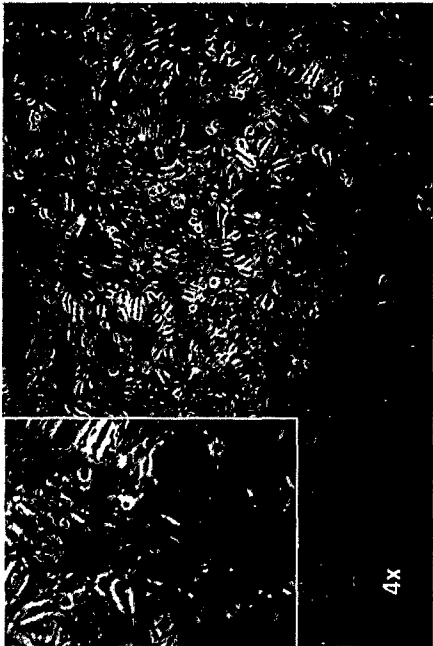
TAG-2A12

TAG-1A3



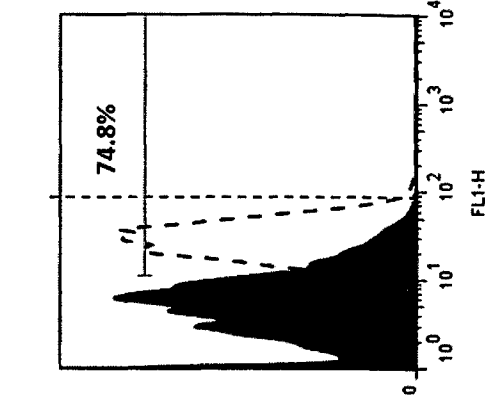
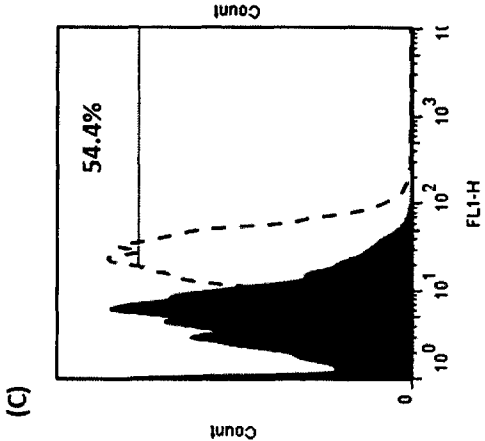
Poor "Fibroblastic-like" Morphology

Grade 3



TAG-2A12

TAG-1A3

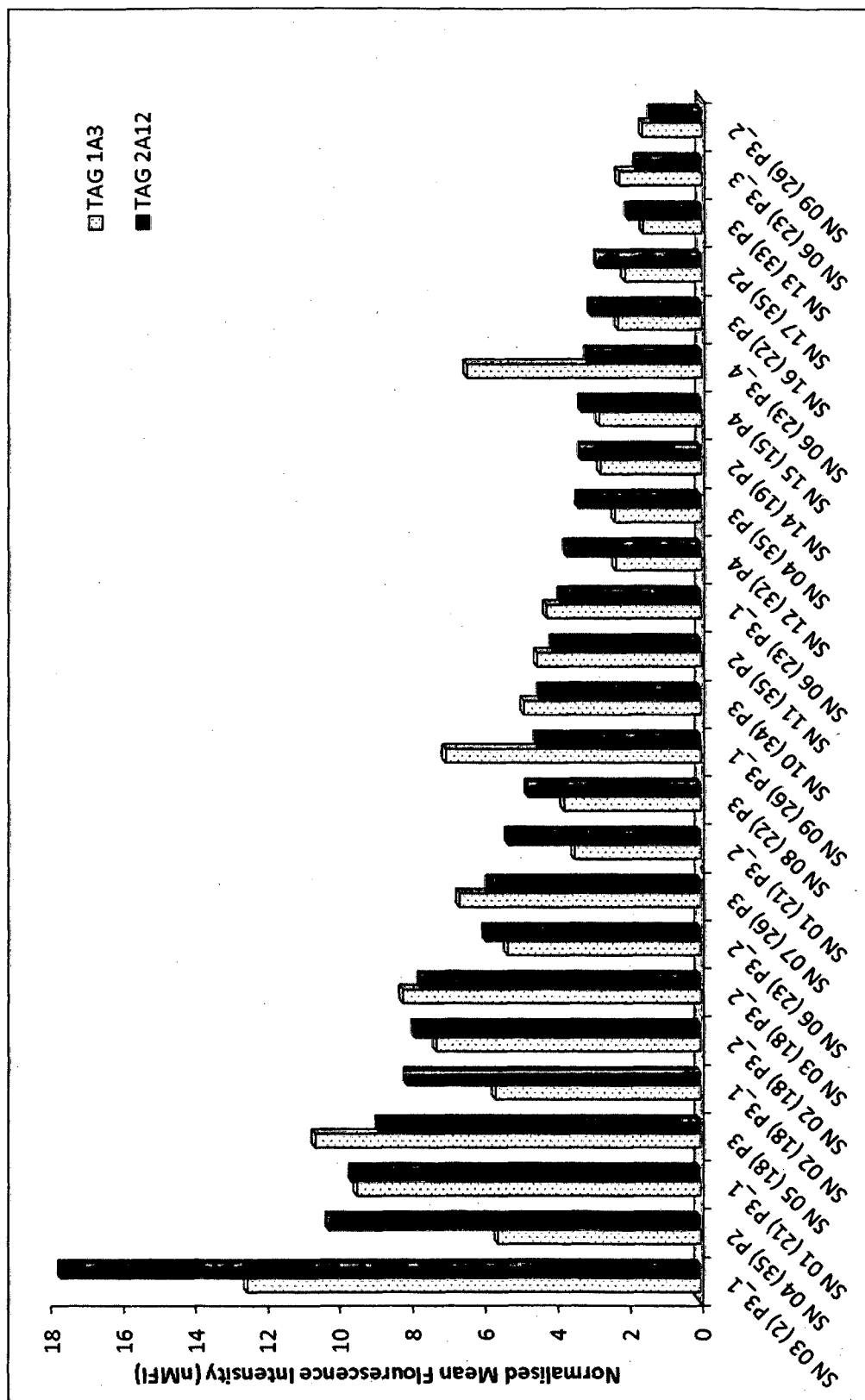


(C)

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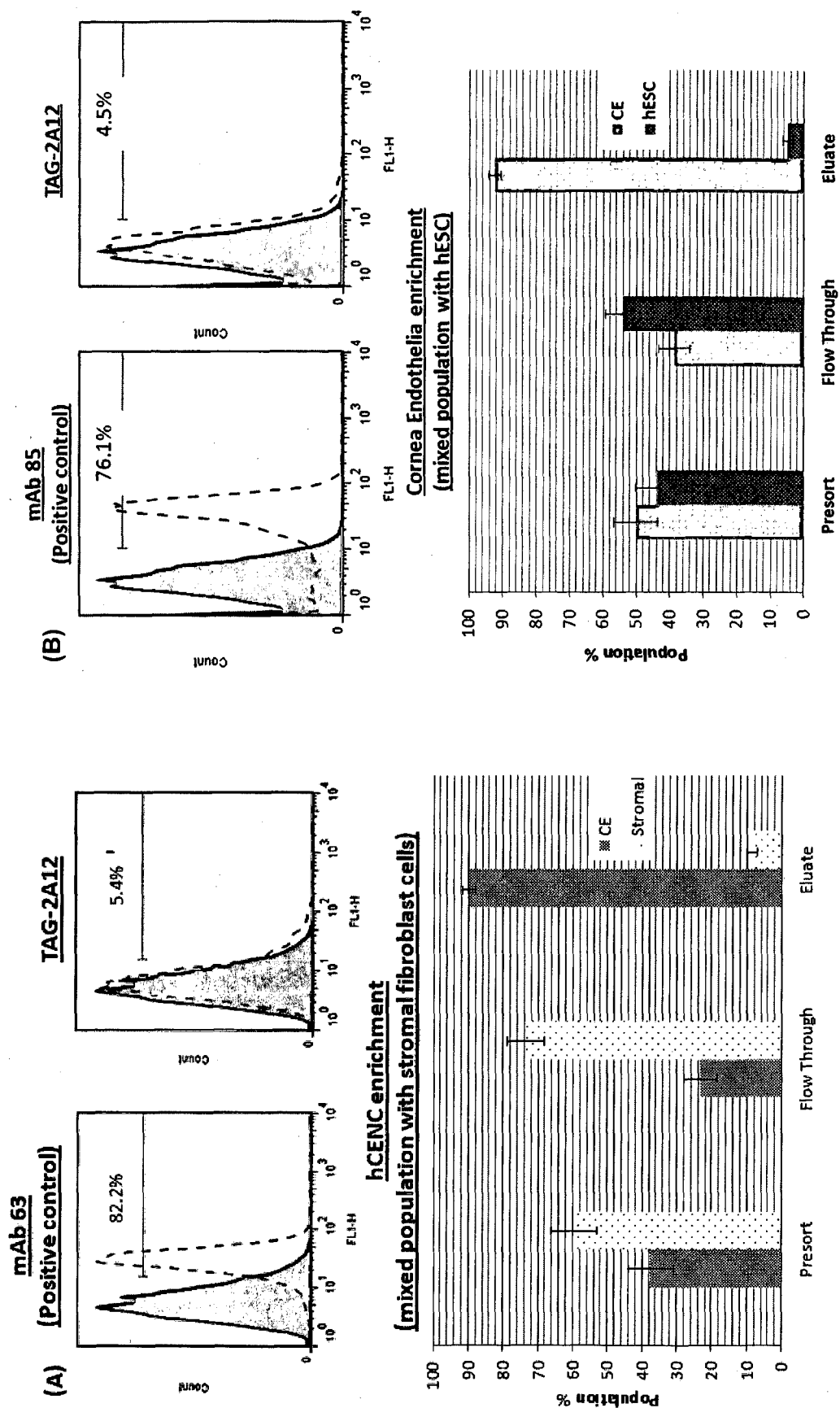
FIG.6 continued

(D)



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FIG. 7



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FIG. 8

(A)

Universal code (SEQ ID NO:7)

Total amino acid number: 122, MW=13545

Max ORF: 1-366, 122 AA, MW=13545

```
1   CAGGTCAAAGTGCAGCAGTCAGGACCTGAGCTGGTGAAGCCTGGGGCTTCAGTGAAGGTA
1   Q V K L Q Q S G P E L V K P G A S V K V

61  TCCTGCAAGGCTTCTGGTTATGCATTCAGTCTACAACATGTACTGGGTGAAGCAGAGC
21  S C K A S G Y A F T S Y N M Y W V K Q S

121 CATGGAAAGAGCCTTGAGTGGATTGGATATATTGATCCTTACAATGGTGGTACTAGCTAC
41  H G K S L E W I G Y I D P Y N G G T S Y

181 AACCAGAAGTTCAAGGGCAAGGCCACATTGACTGTTGACAAGTCCTCCAGCACAGCCTAC
61  N Q K F K G K A T L T V D K S S S T A Y

241 ATGCATCTCAACAGCCTGACATCTGAGGACTCTGCAGTCTATTACTGTGCAAGGCCGATC
81  M H L N S L T S E D S A V Y Y C A R P I

301 TATGATGGTTACTACGGCTGGTACTTCGATGTCTGGGGCCAAGGGACCACGGTCACCGTC
101 Y D G Y Y G W Y F D V W G Q G T T V T V

361 TCCTCA
121 S S
```

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FIG. 8 continued

(B)

Translation of **A12L3** (1-321)

Universal code (SEQ ID NO:8)

Total amino acid number: 107, MW=11567

Max ORF: 1-321, 107 AA, MW=11567

```
1   GACATTGAGCTCACCCAGTCTCCAGCACTCATGTCTGCATCTCCAGGGGAGAAGGTCACC
1   D I E L T Q S P A L M S A S P G E K V T

61  ATGACCTGCAGTGCCAGCTCAAGTGTAAGTTACATGTACTGGTACCAGCAGAAGCCAAGA
21  M T C S A S S S V S Y M Y W Y Q Q K P R

121 TCCTCCCCCAAACCTGGATTTATCTCACATCCAACCTGGCTTCTGGAGTCCCTGCTCGC
41  S S P K P W I Y L T S N L A S G V P A R

181 TTCAGTGGCAGTGGGTCTGGGACCTCTTACTCTCTCACAATCAGCAGCATGGAGGCTGAA
61  F S G S G S G T S Y S L T I S S M E A E

241 GATGCTGCCACTTATTACTGCCAGCAGTGGAGTAGTAACCCCTCACGTTCCGGTGCTGGG
81  D A A T Y Y C Q Q W S S N P L T F G A G

301 ACCAAGCTGGAAATAAAACGG
101 T K L E I K R
```

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FIG. 8 continued

(C)

TAG-2A12 (CE2A12)

>CE2A12| HeavyChain

QVKLQQSGPELVKPGASVKVSCASGYAFTSYNMYWVKQSHGKSLEWI
GYIDPYNGGTSYNQKFKG
KATLTVDKSSSTAYMHLNSLTSEDSAVYYCARPIYDGYYGWYFDVWGQG
TTVTVSS (SEQ ID NO:7)

heavy chain CDR 1: GYAFTSYNMY (SEQ ID NO:1)

heavy chain CDR 2: YIDPYNGGTSYNQKFKG (SEQ ID NO:2)

heavy chain CDR 3: PIYDGYYGWYFDV (SEQ ID NO:3)

>CE2A12| LightChain

DIELTQSPALMSASPGEKVTMTCSASSSVSYMYWYQQKPRSSPKPWIYL
TSNLAS
GVPARFSGSGSGTSYSLTISSMEAEDAATYYCQQWSSNPLTFGAGTKLEI
KR (SEQ ID NO:8)

Light chain CDR 1: SASSSVSYMY (SEQ ID NO:4)

Light chain CDR 2: LTSNLAS (SEQ ID NO:5)

Light chain CDR 3: QQWSSNPLT (SEQ ID NO:6)

FIG. 9

TAG 2A12-Peroxiredoxin6 (SEQ ID NO:9)

MPGGLLLGDVAPNFEANTTVGRIRFHDFLGDSWGILFSHPRDFTPVCTTELGRAAKLAPEFAKRN
VKLIALSIDSVEDHLAWSKDINAYNCEEPTEKLPFPIIDDRNRELAILLGMLDPAEKDEKGMPVTARV
VFVFGPDKKLKLSILYPATTGRNFDEILRVVISLQLTAEKRVATPVDWKDGDSVMVLPTIPEEEAKKL
FPKGVFTKELPSGKKYLRYTPQP

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FIG. 10

(A)

<u>mAbs</u>	<u>Antigen Target</u>	<u>Molecular Weight (with hCENC)</u>	<u>Molecular Weight (with other cell lines)</u>	<u>Sequence homology to PRDX-6 (uniprot BlastP)</u>	<u>Remarks</u>
TAG 2A12	Prdx6	28kDa	>25kDa (Based on product sheet)	100%	Based our own findings Anti-PRDX6 Abcam # ab16946
TAG 1A3	CD166/ALCAM	80kDa	100-105kDa (Based on product sheet)	23%	Based our own findings Anti-CD166 Abcam #ab109215
Anti-CD200	CD200	N.A.	40-45kDa (Based on Product Spec Sheet)	4%	Anti-CD200 BD Pharmagen #552023
Anti-GPC4	GPC4	N.A.	62.4kDa (Based on product Spec Sheet)	29%	Anti-GPC4 Novus Biological #NBP1- 45286
mAb 9.3E	Unknown	130kDa	130kDa (human umbilical vein endothelial cells)	N.A.	K.Engelmann et. al. 2001 Exp Eye Res. 73, 9-16
2B4.14.1	Tamm-Horsfall Glycoprotein (THGP)	N.A.	65kDa (with purified THGP); 250-325kDa (with pig and human ciliary body glycoprotein)	No significant similarities found	Howell et. al.; 1991 Inv. Opth. & Vis Scj. 32 (9); Howell et. al. 1994 Inv. Opth. & Vis Scj. 35 (8)
KP14D10	Unknown	N.A.	60kDa (Bovine corneal endothelial cells)	N.A.	Sakamoto et. al. 1991 Graefes Arch Clinical Exp Opth. 229:587- 592 (Note: Antibody is an IgM)

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FIG. 10 continued

(B)

Sequences producing significant alignments:

Select: All None Selected: 0
☐ Alignments ☐ Download ☐ GenBank ☐ Graphics ☐ Distance tree of results ☐ Multiple alignment

	Description	Max score	Total score	Query cover	E value	Ident	Accession
☒	ReName: Full=OX-2 membrane glycoprotein; AltName: CD_antigen=CD200; Flags: Precursor>refNP_065247539.1 PREDICTED: OX-2 membrane	14.2	14.2	4%	3.1	44%	P41217.4
☐	ReName: Full=Clvican-4; AltName: Full=K-clvican; Contains: ReName: Full=Secreted clvican-4; Flags: Precursor>refNP_001438214 clvican	22.3	39.3	29%	0.017	29%	O75487.4
☐	ReName: Full=CD166 antigen; AltName: Full=Activated leukocyte cell adhesion molecule; AltName: CD_antigen=CD166; Flags: Precursor>refNP_013740.2	16.9	30.4	23%	0.81	24%	Q13740.2