Figure 1A

Peptide: ALHRPDVYL (A*02)
Seq ID NO: 2

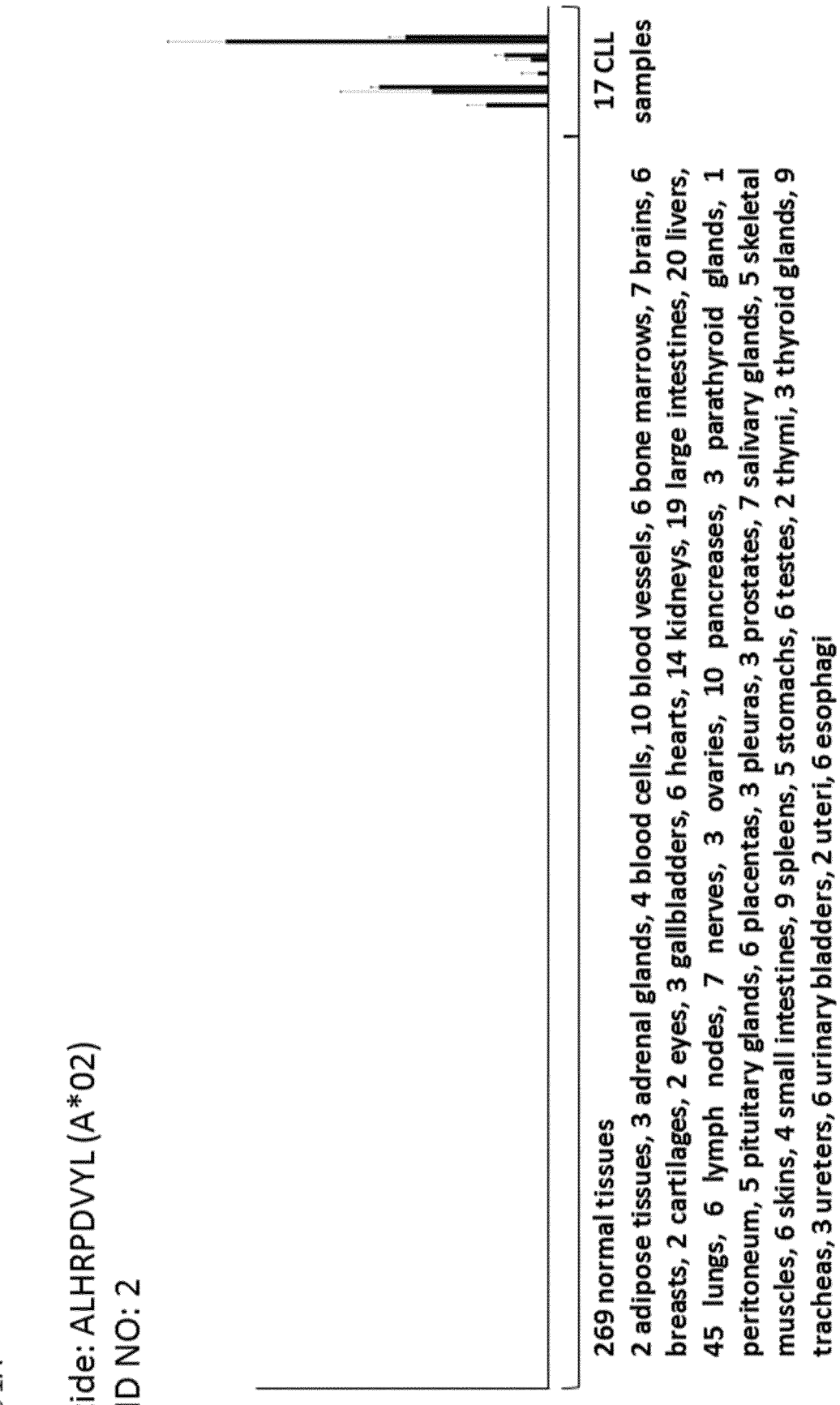


Figure 1B

Peptide: VIAELPPKV (A*02)
SEQ ID NO: 3

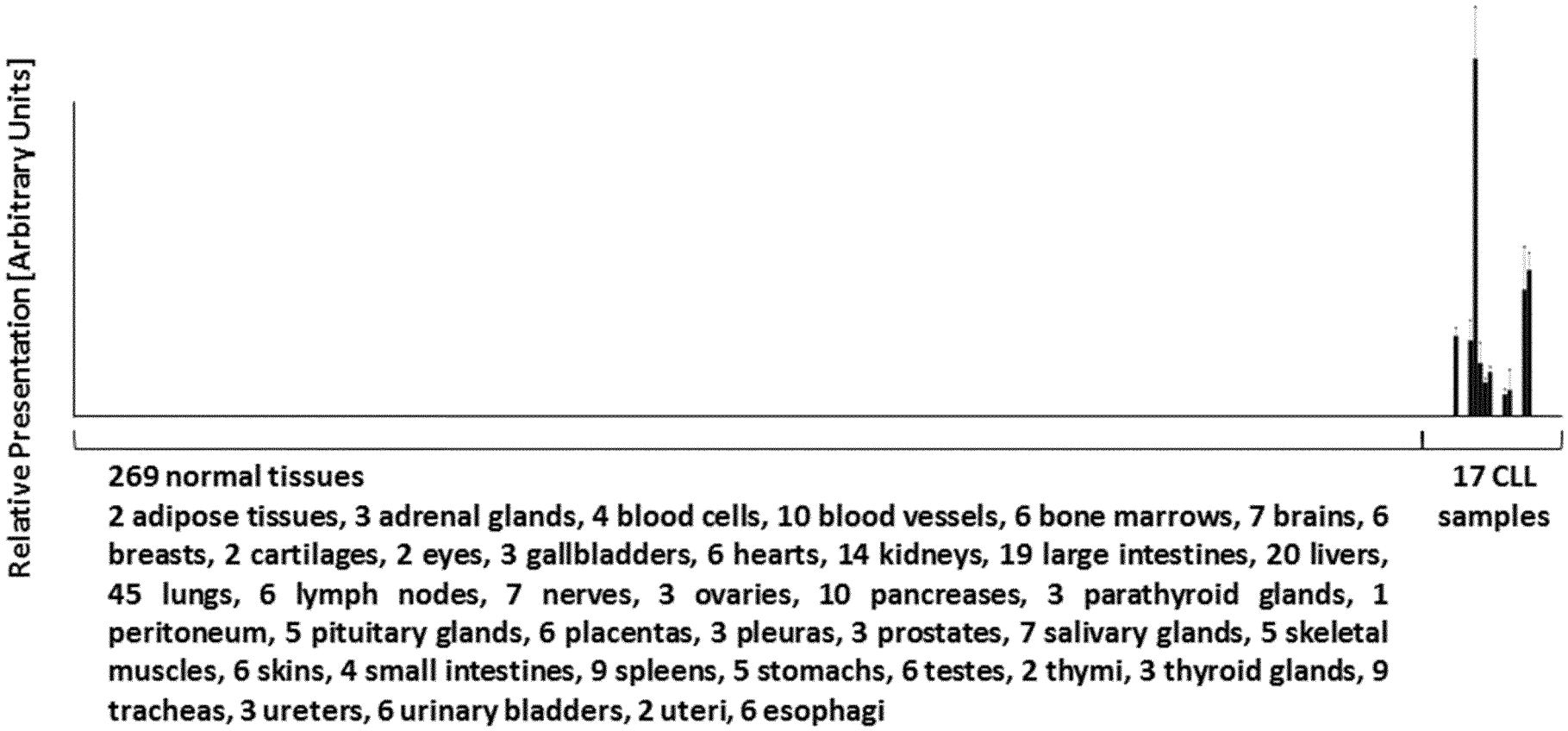


Figure 1C

Peptide: VIAELPPKVSV (A*02)
SEQ ID NO: 4

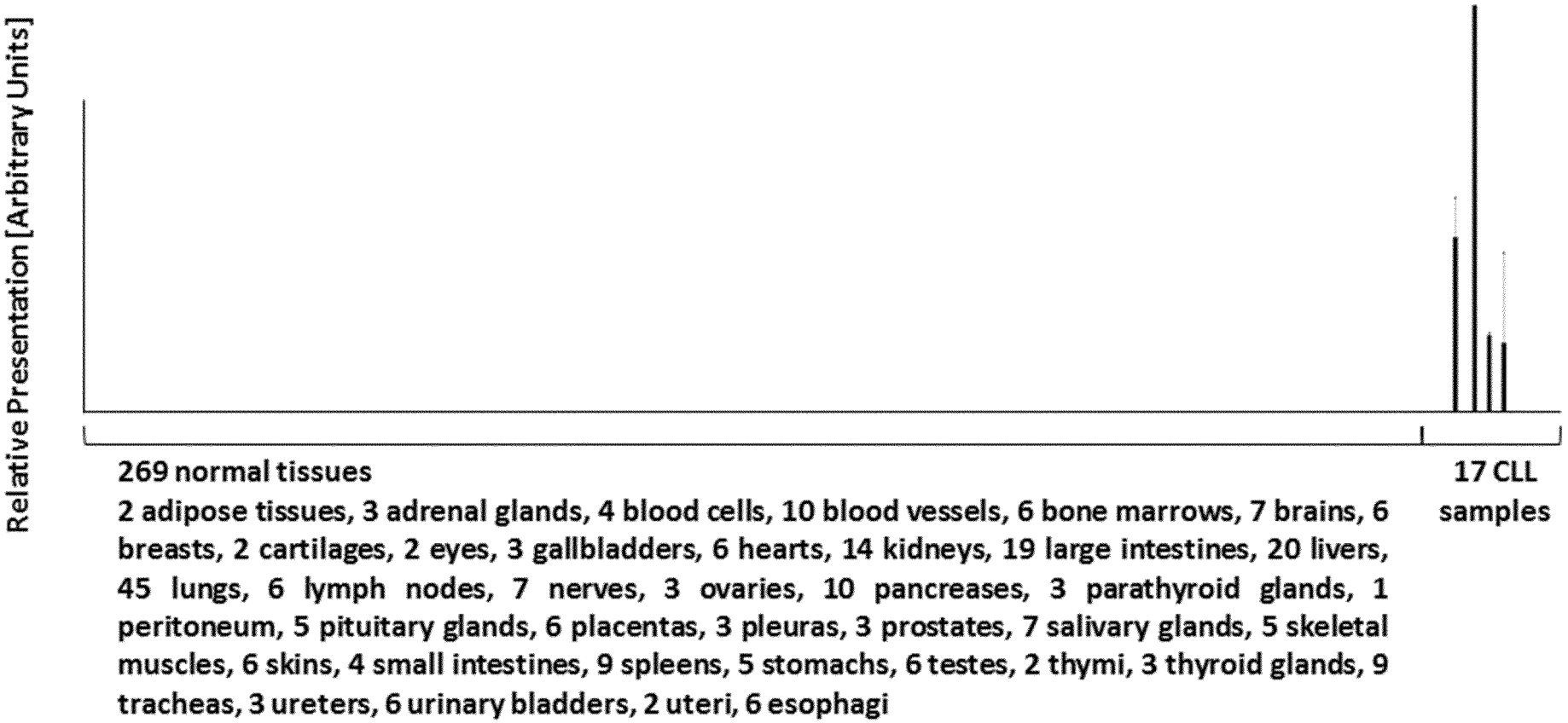


Figure 1D

Peptide: RLYEITIEV (A*02)
SEQ ID NO: 121

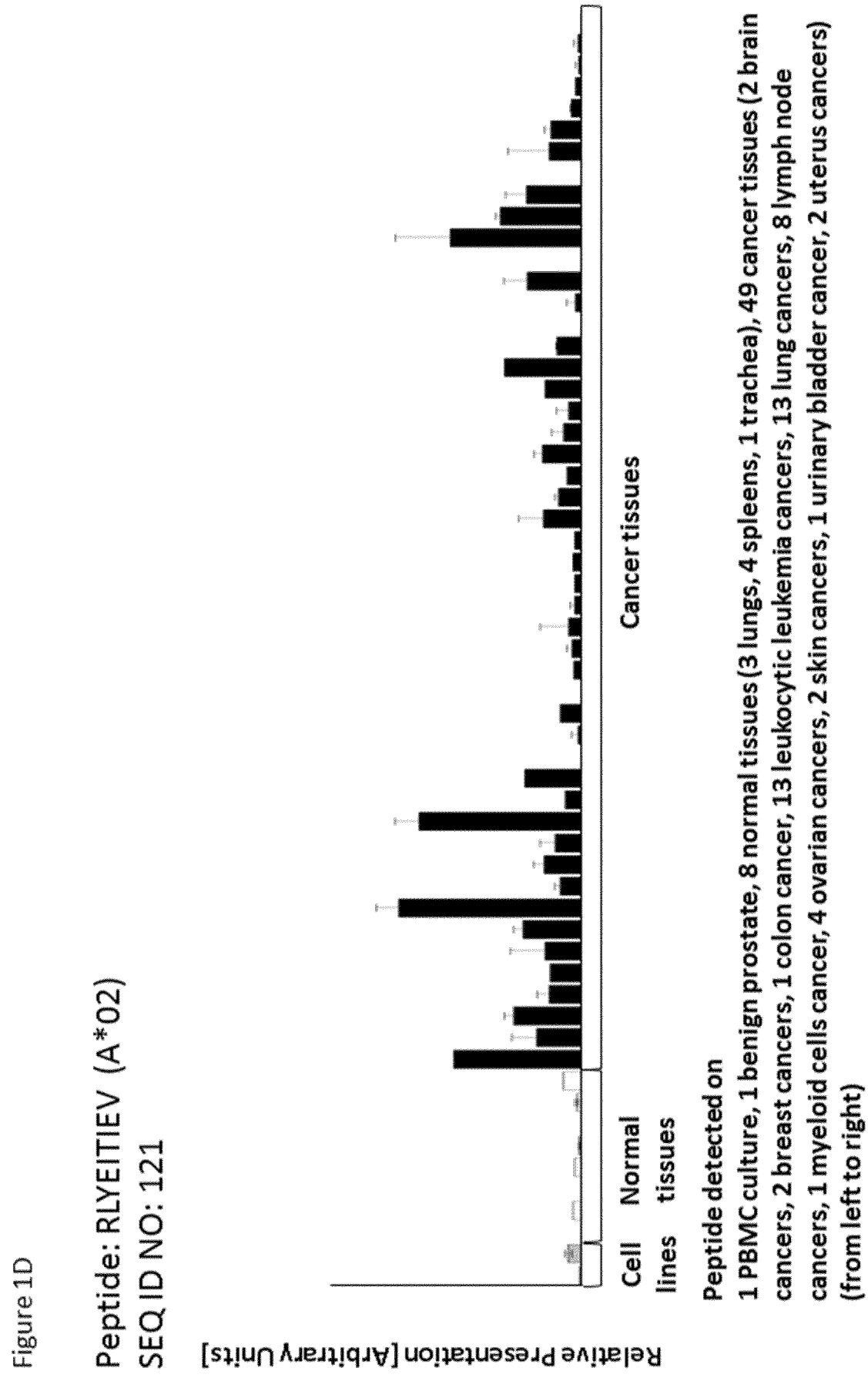


Figure 1E
Peptide: ALLRLLPGL (A*02)
SEQ ID NO: 14

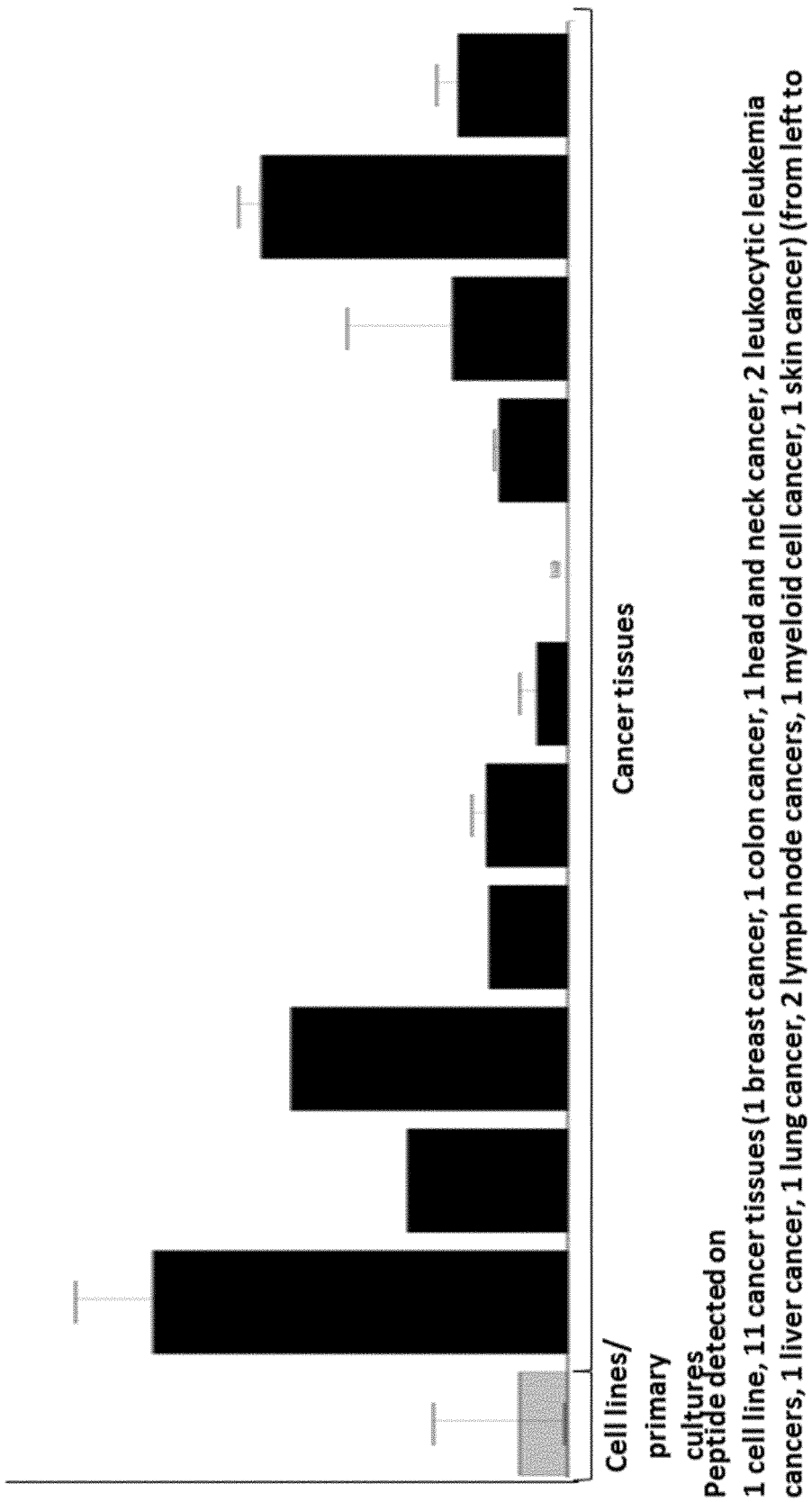
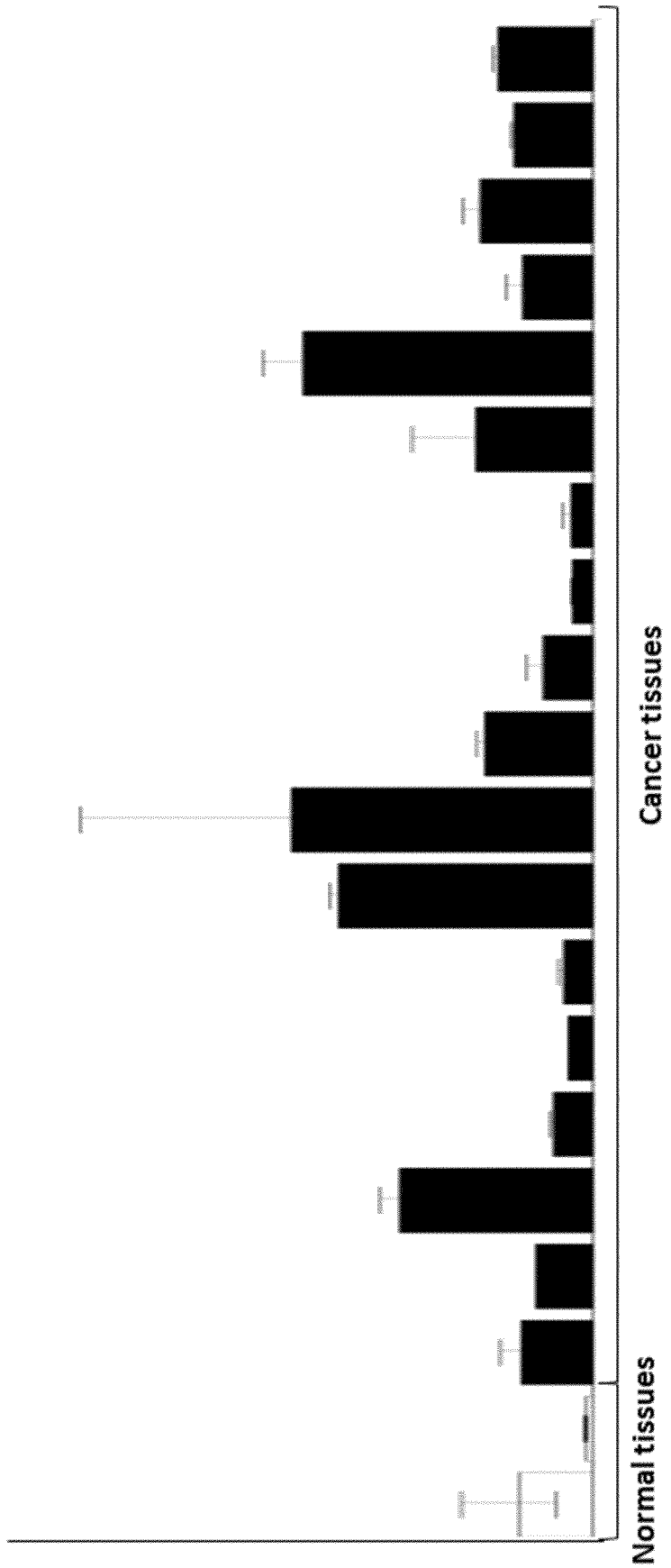


Figure 1F

Peptide: GIIDGSPRL (A*02)

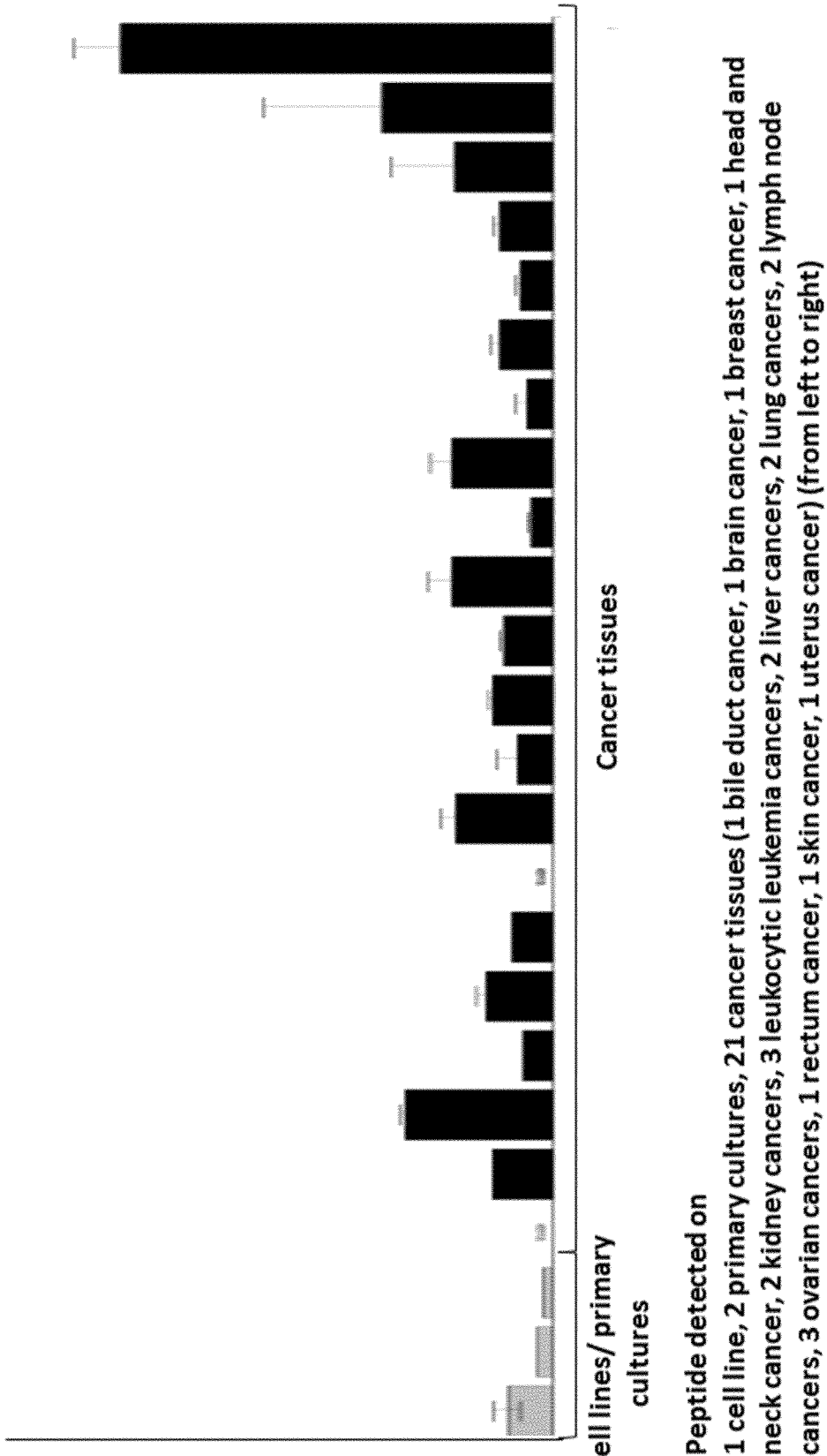
SEQ ID NO: 62



Peptide detected on
2 normal tissues (1 lymph node, 1 spleen), 18 cancer tissues (2 colon cancers, 9 leukocytic leukemia cancers, 6 lymph node cancers, 1 rectum cancer) (from left to right)

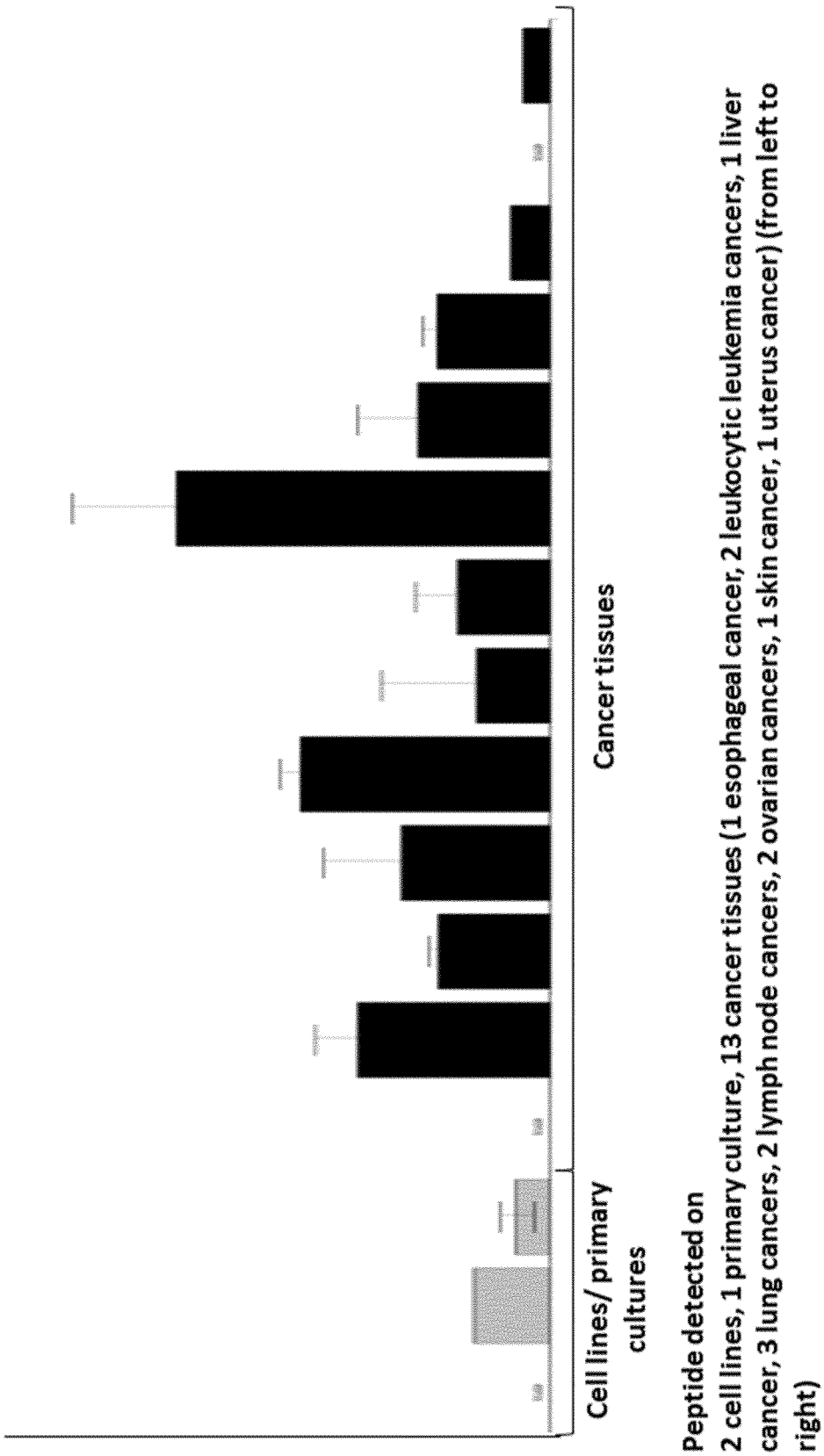
Figure 1G

Peptide: GLDQQFAGLDL (A*02)
SEQ ID NO: 68



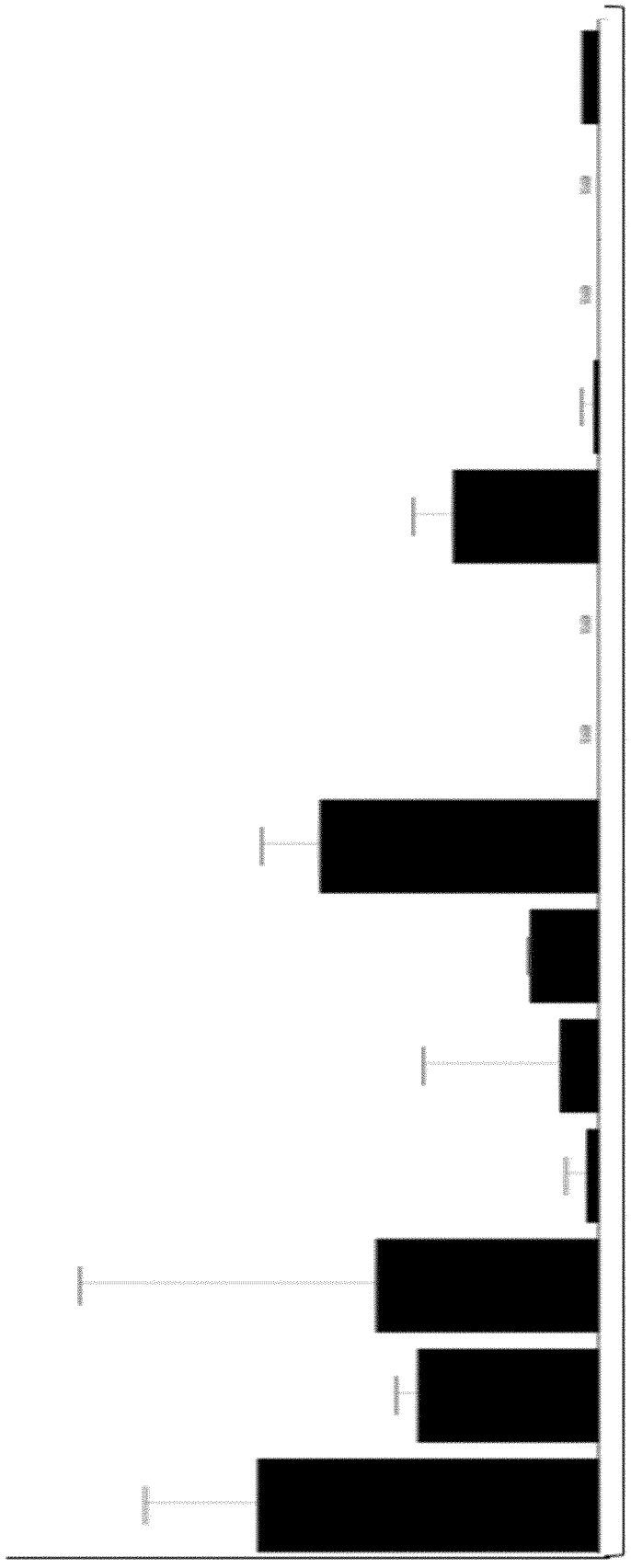
Peptide detected on
1 cell line, 2 primary cultures, 21 cancer tissues (1 bile duct cancer, 1 brain cancer, 1 breast cancer, 1 head and neck cancer, 2 kidney cancers, 3 leukocytic leukemia cancers, 2 liver cancers, 2 lung cancers, 2 lymph node cancers, 3 ovarian cancers, 1 rectum cancer, 1 skin cancer, 1 uterus cancer) (from left to right)

Figure 1H
Peptide: KTLDVDATYEI (A*02)
SEQ ID NO: 112



Peptide detected on
2 cell lines, 1 primary culture, 13 cancer tissues (1 esophageal cancer, 2 leukocytic leukemia cancers, 1 liver cancer, 3 lung cancers, 2 lymph node cancers, 2 ovarian cancers, 1 skin cancer, 1 uterus cancer) (from left to right)

Figure 1l
Peptide: SIIEGPIIKL (A*02)
SEQ ID NO: 146



Peptide detected on
14 cancer tissues (1 head and neck cancer, 3 leukocytic leukemia cancers, 6 lung cancers, 1 lymph node cancer, 1 ovarian cancer, 2 urinary bladder cancers) (from left to right)

Figure 1J

Peptide: SILETVATL (A*02)
SEQ ID NO: 147

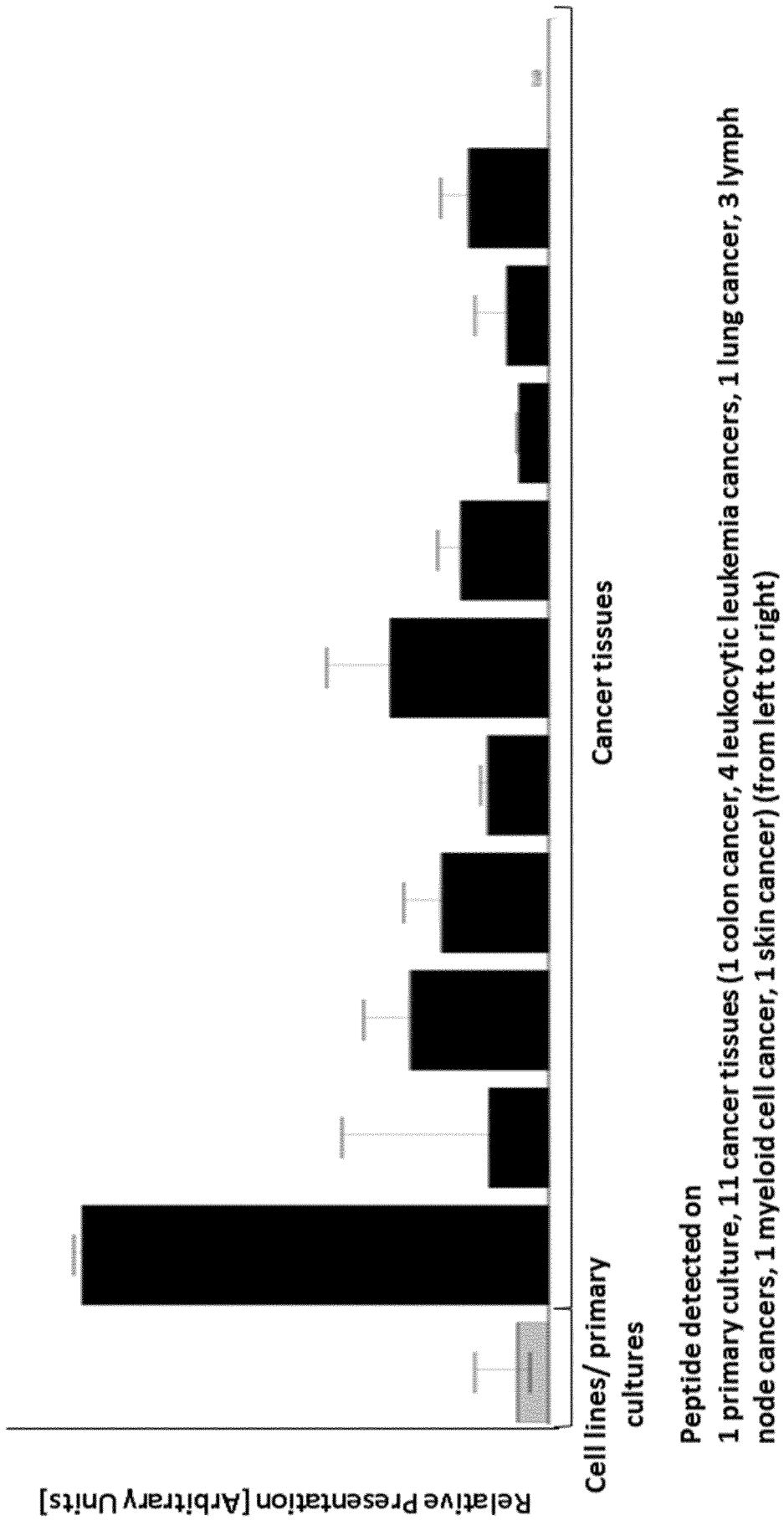


Figure 1K

Peptide: SLLAELHVL (A*02)

SEQ ID NO: 153

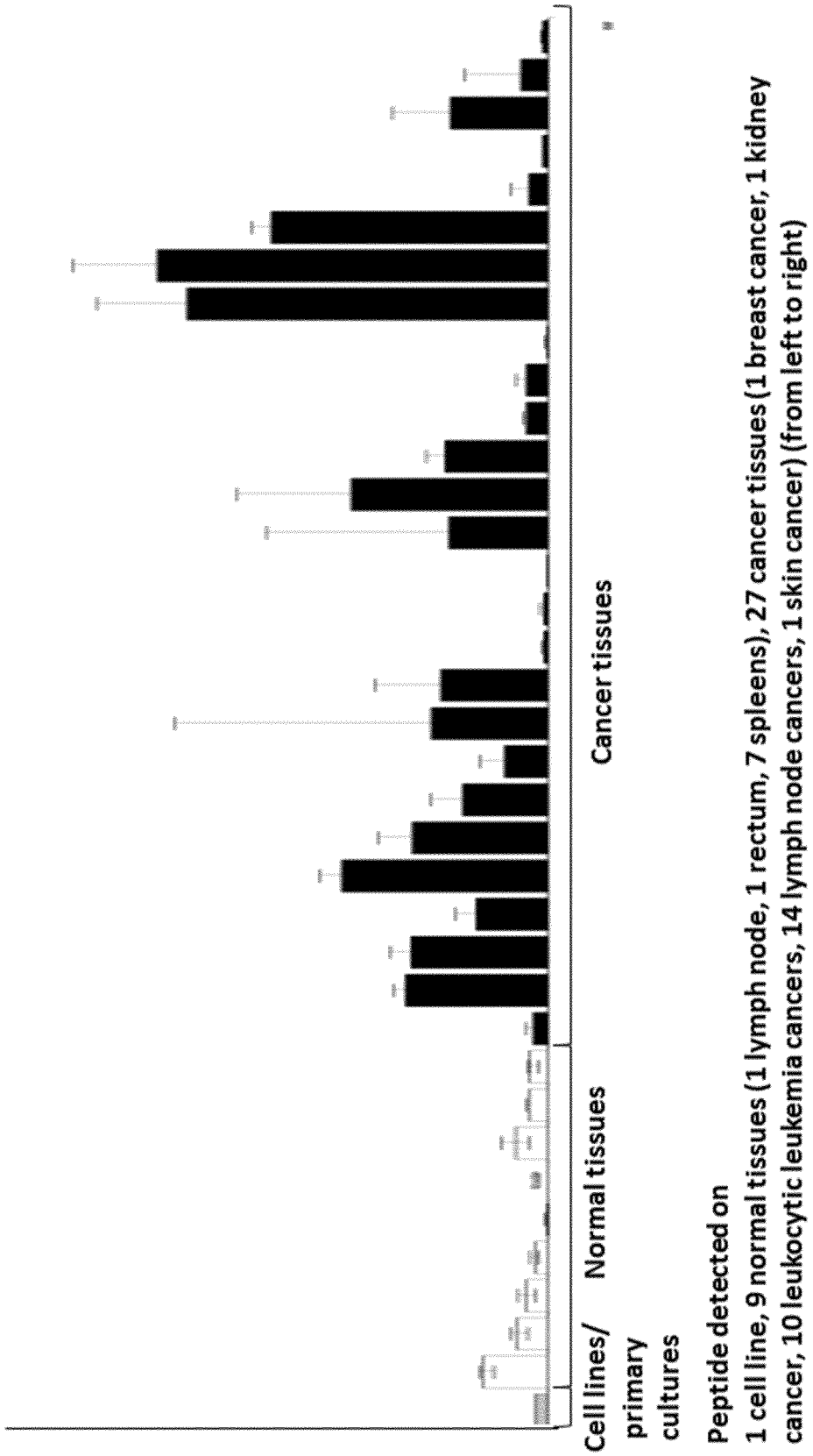
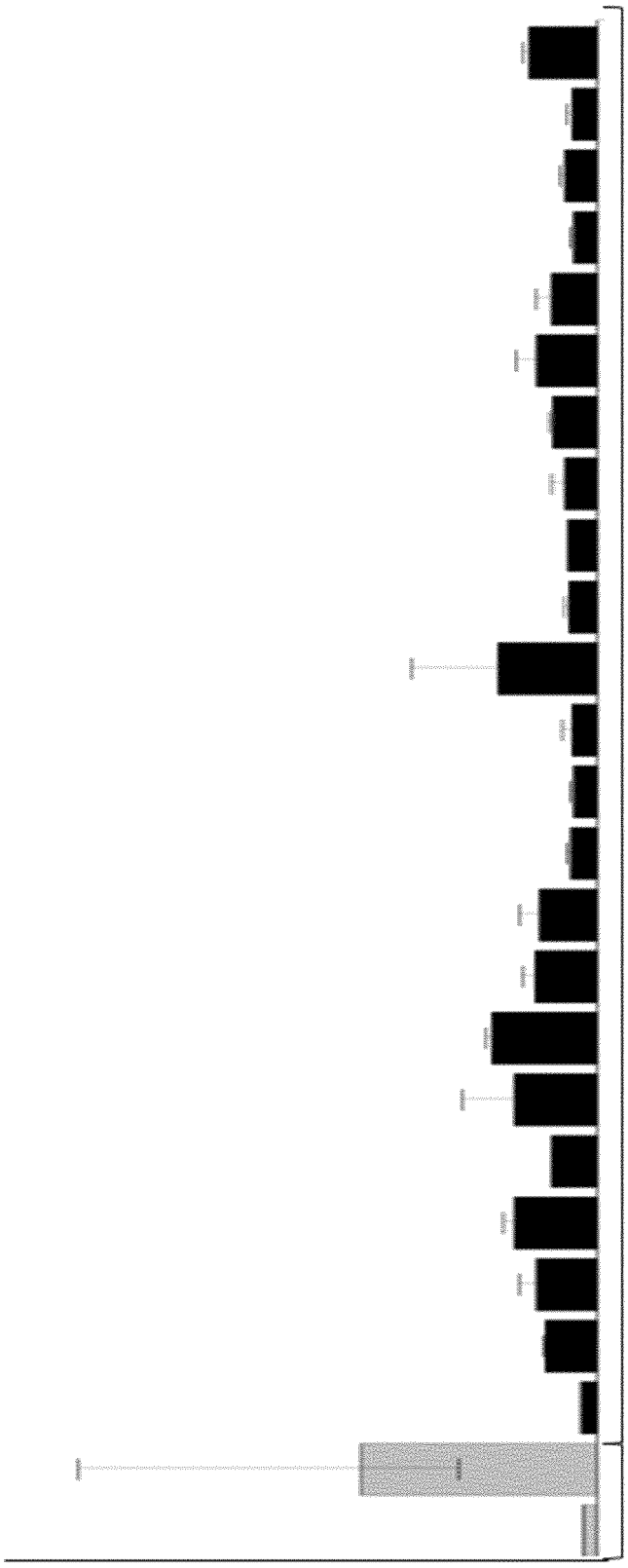


Figure 1L

Peptide: SLQEEKLIYV (A*02)
SEQ ID NO: 159



Peptide detected on
2 cell lines, 23 cancer tissues (5 brain cancers, 1 breast cancer, 1 esophageal cancer, 3 head and neck cancers, 2 leukocytic leukemia cancers, 5 lung cancers, 3 lymph node cancers, 1 skin cancer, 2 urinary bladder cancers)
(from left to right)

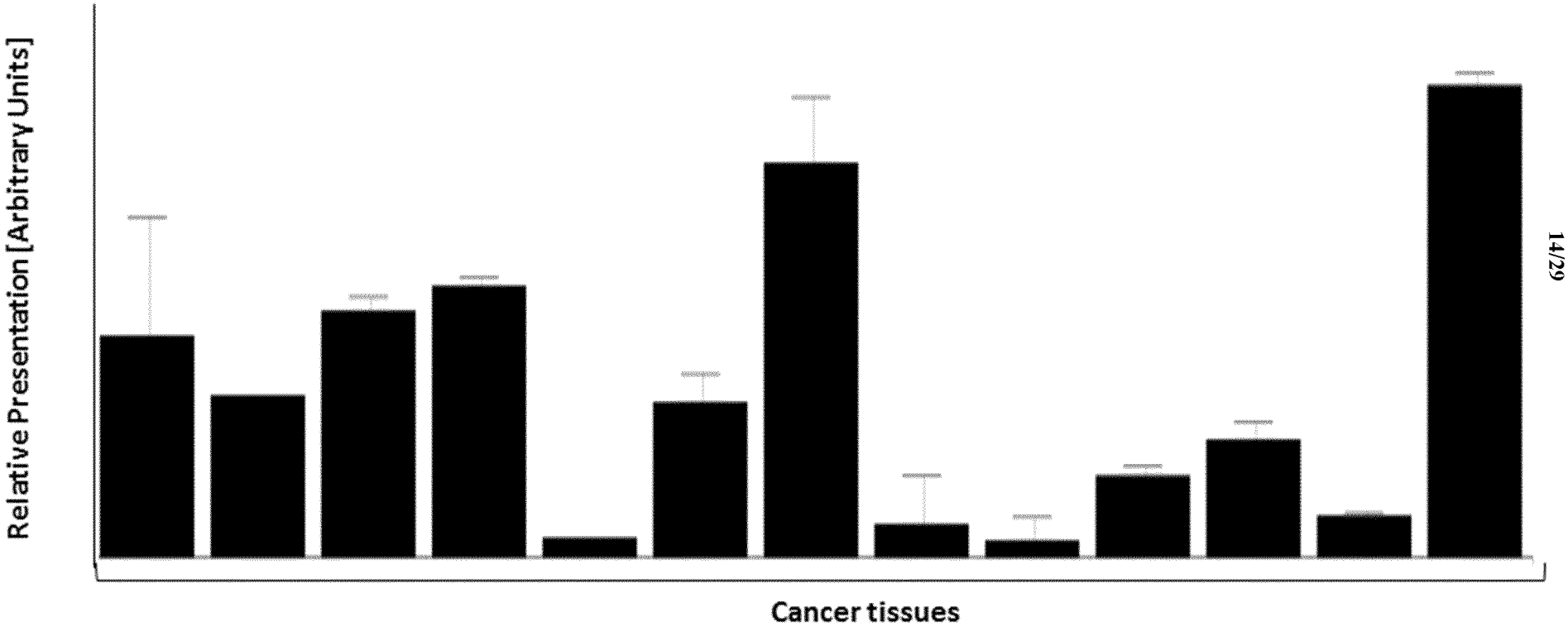
Figure 1M
Peptide: SVHKGFAFV (A*02)
SEQ ID NO: 164

Peptide detected on
10 cell lines, 1 primary culture, 1 normal tissue (1 adrenal gland), 36 cancer tissues (12 brain cancers, 1 colon cancer, 2 head and neck cancers, 2 kidney cancers, 3 leukocytic leukemia cancers, 1 liver cancer, 5 lung cancers, 1 myeloid cell cancer, 1 ovarian cancer, 1 rectum cancer, 1 skin cancer, 2 stomach cancers, 2 urinary bladder cancers, 2 uterus cancers) (from left to right)

Figure 1N

Peptide: TLDTSKLYV (A*02)

SEQ ID NO: 167

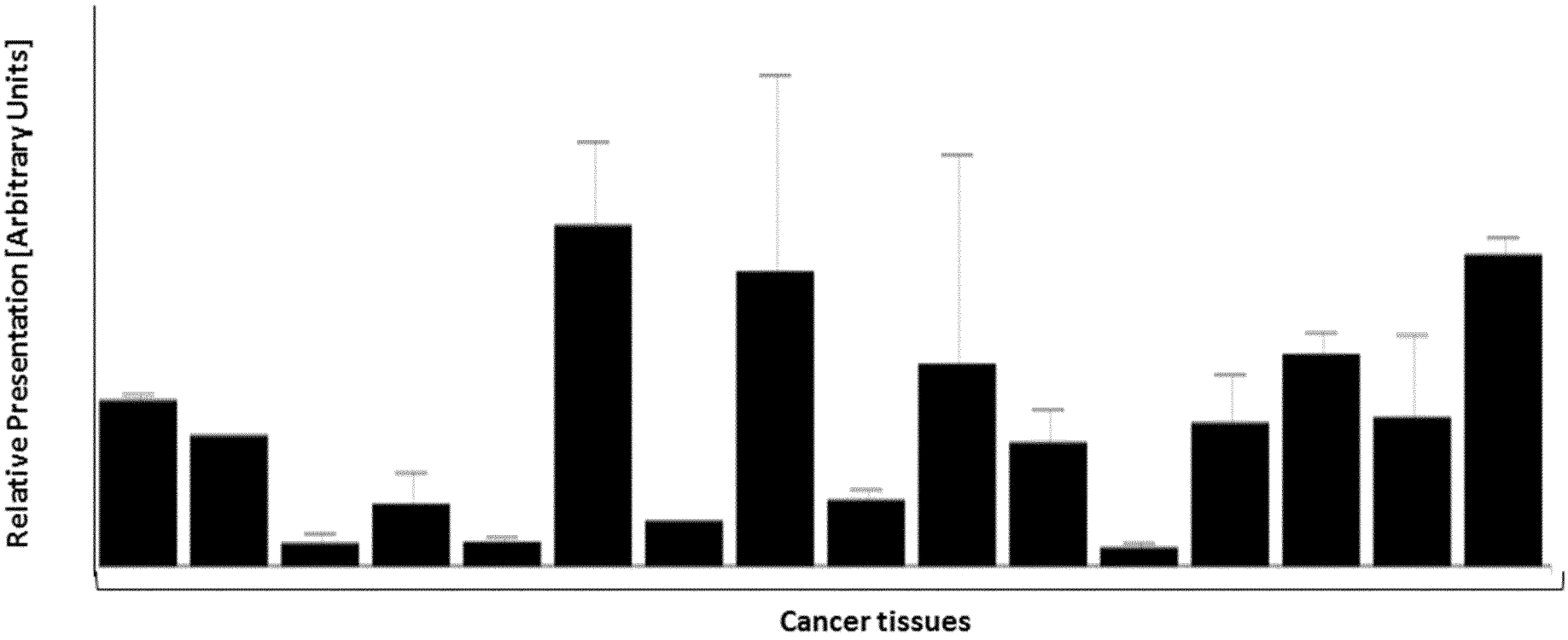


Peptide detected on
13 cancer tissues (1 brain cancer, 8 leukocytic leukemia cancers, 4 lymph node cancers) (from left to right)

Figure 1O

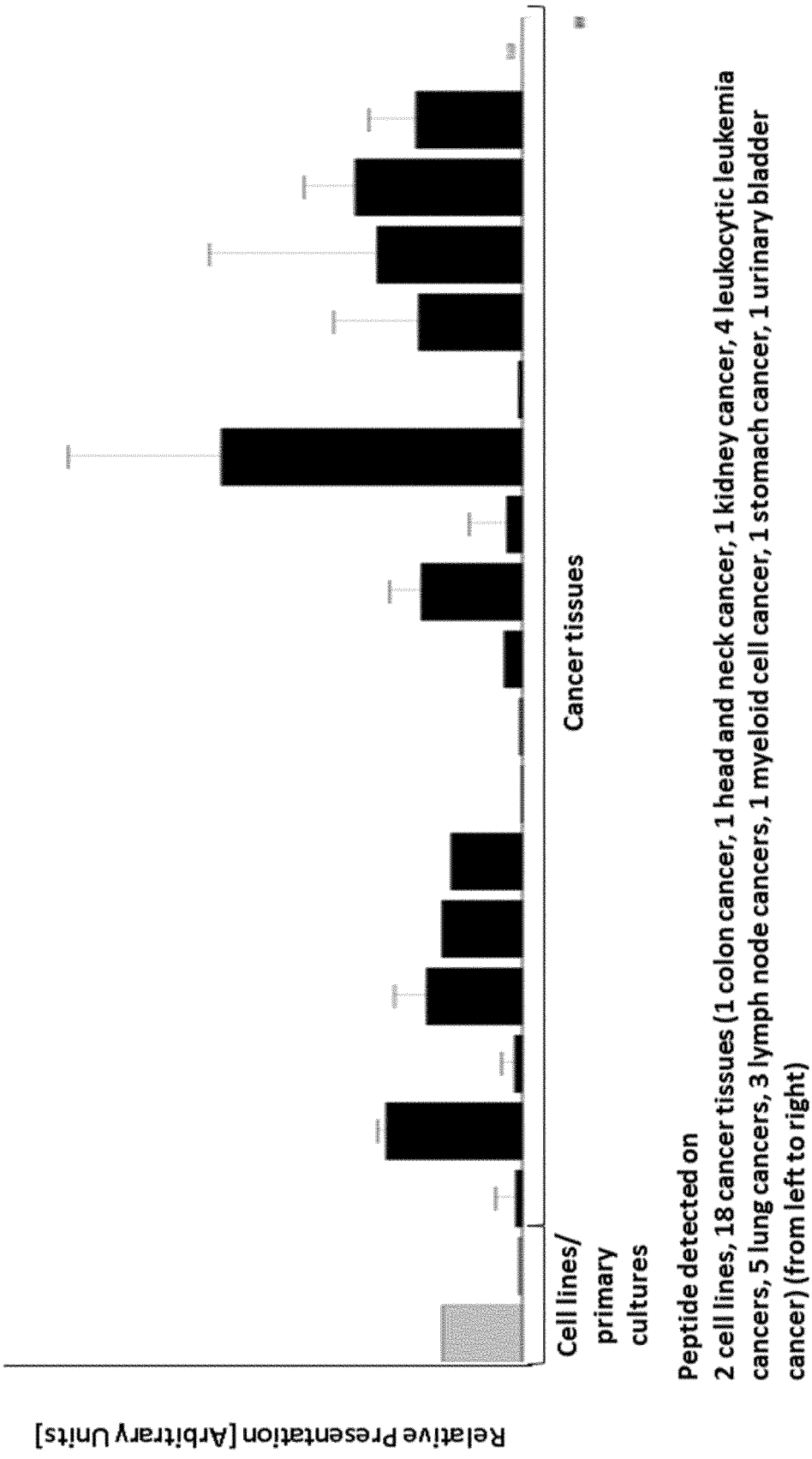
Peptide: YLLDQSFVM (A*02)

SEQ ID NO: 168



Peptide detected on
16 cancer tissues (10 leukocytic leukemia cancers, 6 lymph node cancers) (from left to right)

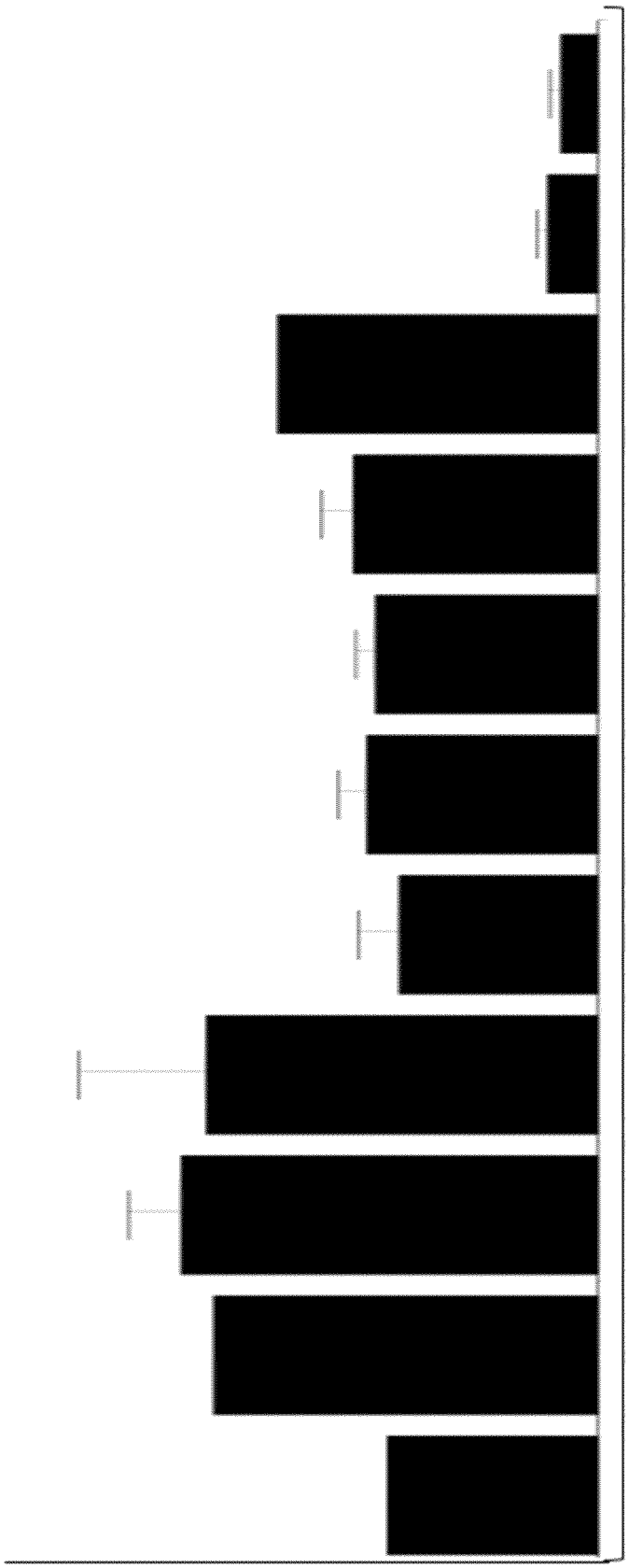
Figure 1P
Peptide: YIQEYLTLL (A*02)
SEQ ID NO: 192



Peptide detected on
2 cell lines, 18 cancer tissues (1 colon cancer, 1 head and neck cancer, 1 kidney cancer, 4 leukocytic leukemia cancers, 5 lung cancers, 3 lymph node cancers, 1 myeloid cell cancer, 1 stomach cancer, 1 urinary bladder cancer) (from left to right)

Figure 1Q

Peptide: YLQEVPILTL (A*02)
SEQ ID NO: 197

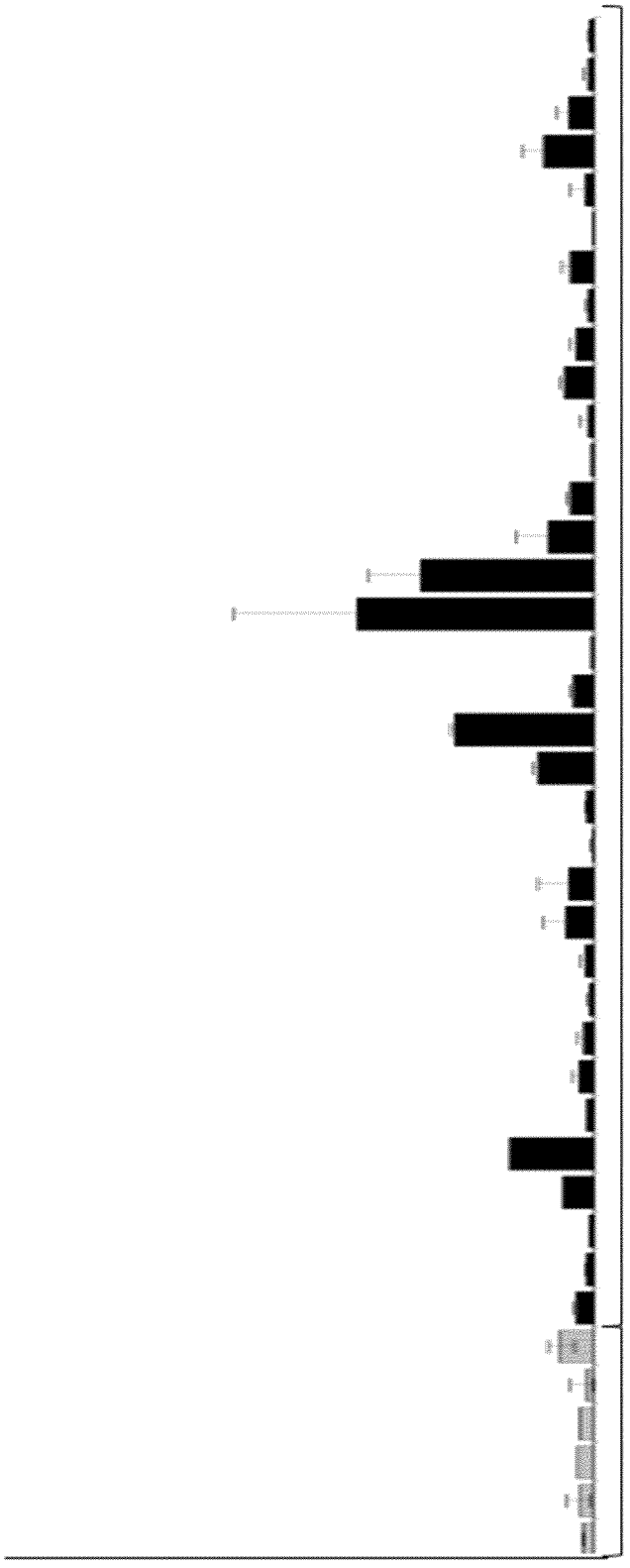


Peptide detected on
11 cancer tissues (5 leukocytic leukemia cancers, 4 lymph node cancers, 1 skin cancer, 1 uterus cancer) (from left to right)

Figure 1R

Peptide: YMFEEVPIVI (A*02)

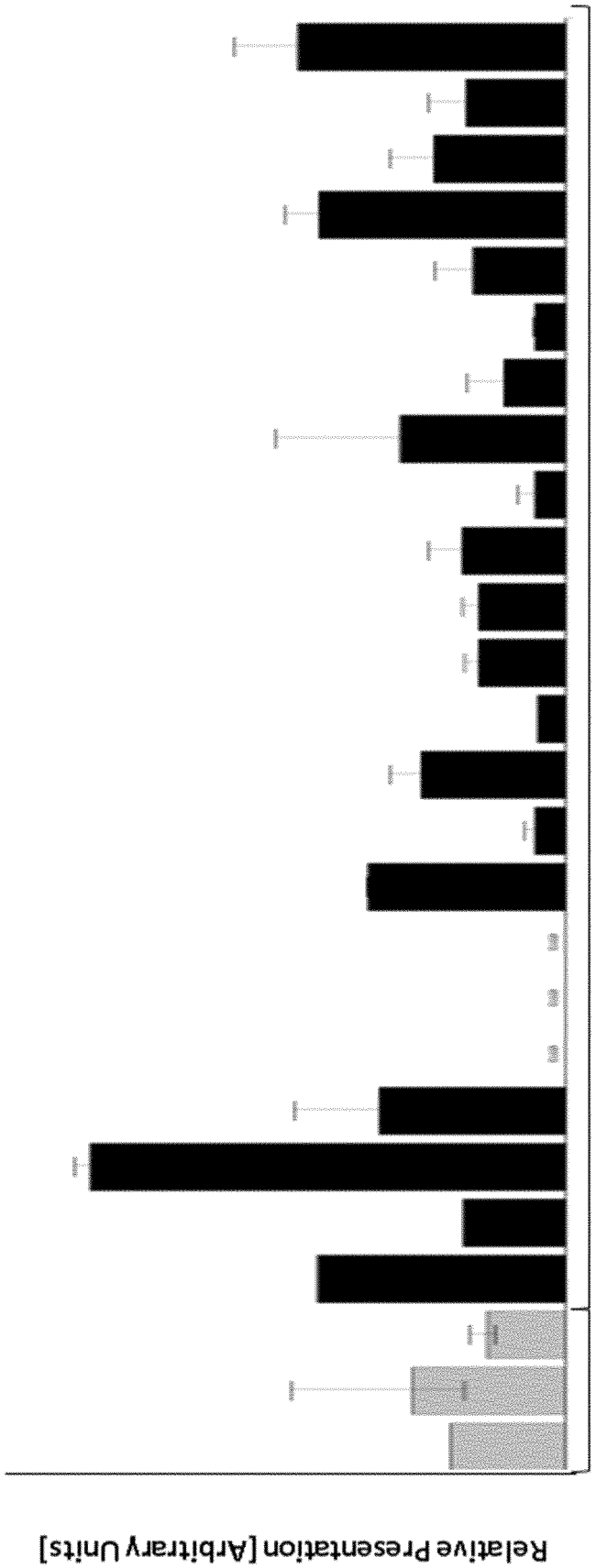
SEQ ID NO: 200



Peptide detected on
4 cell lines, 2 primary cultures, 34 cancer tissues (1 bile duct cancer, 2 breast cancers, 1 colon cancer, 1 esophageal cancer, 1 gallbladder cancer, 5 head and neck cancers, 2 leukocytic leukemia cancers, 2 liver cancers, 9 lung cancers, 4 lymph node cancers, 2 ovarian cancers, 1 rectum cancer, 2 skin cancers, 1 urinary bladder cancer) (from left to right)

Figure 1S

Peptide: LIDVKPLGV (A*02)
SEQ ID NO: 211

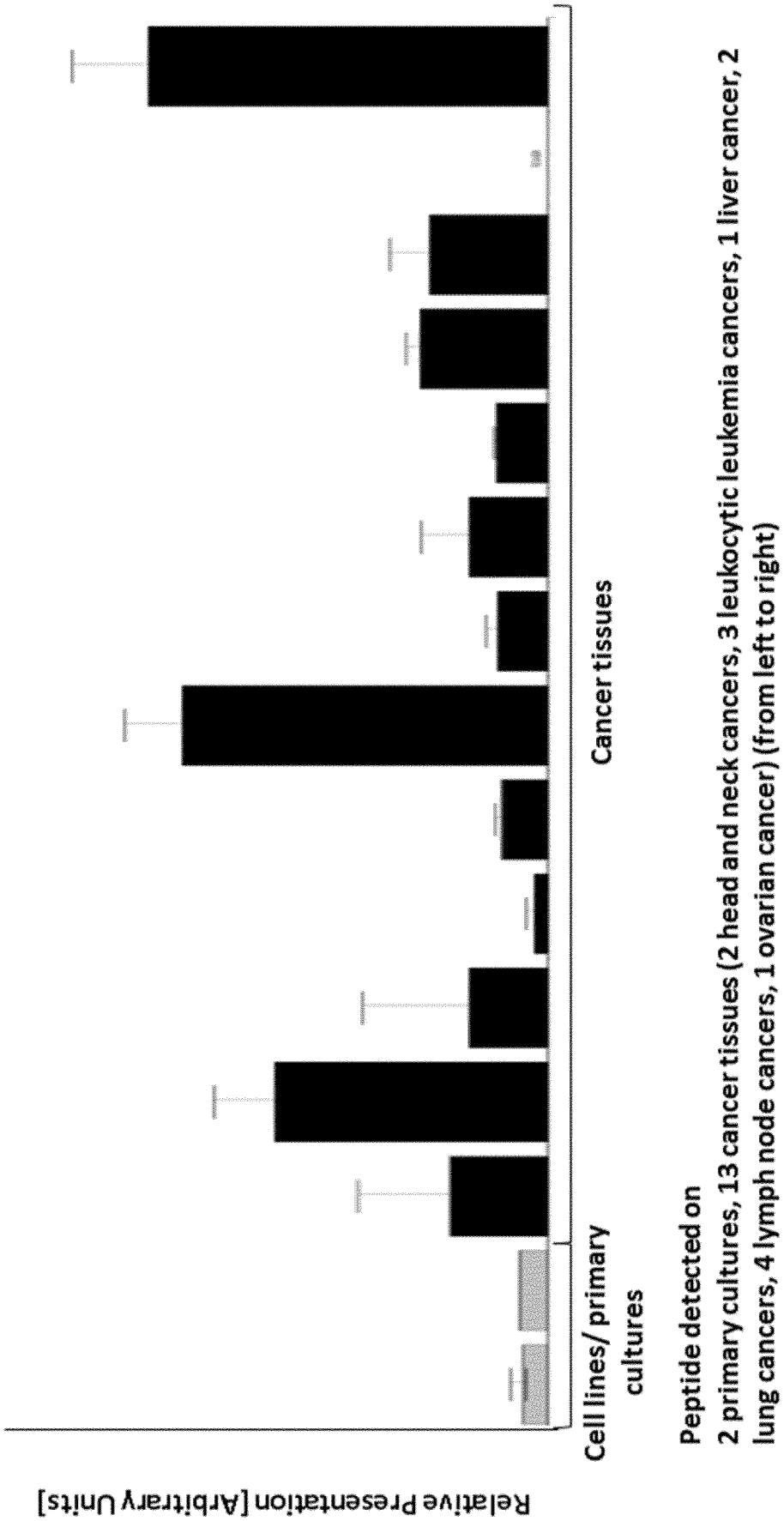


Peptide detected on
3 cell lines, 23 cancer tissues (5 brain cancers, 1 breast cancer, 1 esophageal cancer, 1 head and neck cancer, 1 kidney cancer, 3 leukocytic leukemia cancers, 2 liver cancers, 2 lung cancers, 4 lymph node cancers, 1 ovarian cancer, 1 prostate cancer, 1 skin cancer) (from left to right)

Figure 1T

Peptide: QLLPVSNVVSV (A*02)

SEQ ID NO: 256



Peptide detected on 2 primary cultures, 13 cancer tissues (2 head and neck cancers, 3 leukocytic leukemia cancers, 1 liver cancer, 2 lung cancers, 4 lymph node cancers, 1 ovarian cancer) (from left to right)

Figure 1U
Peptide: LLYNSTDPTL (A*02)
SEQ ID NO: 312

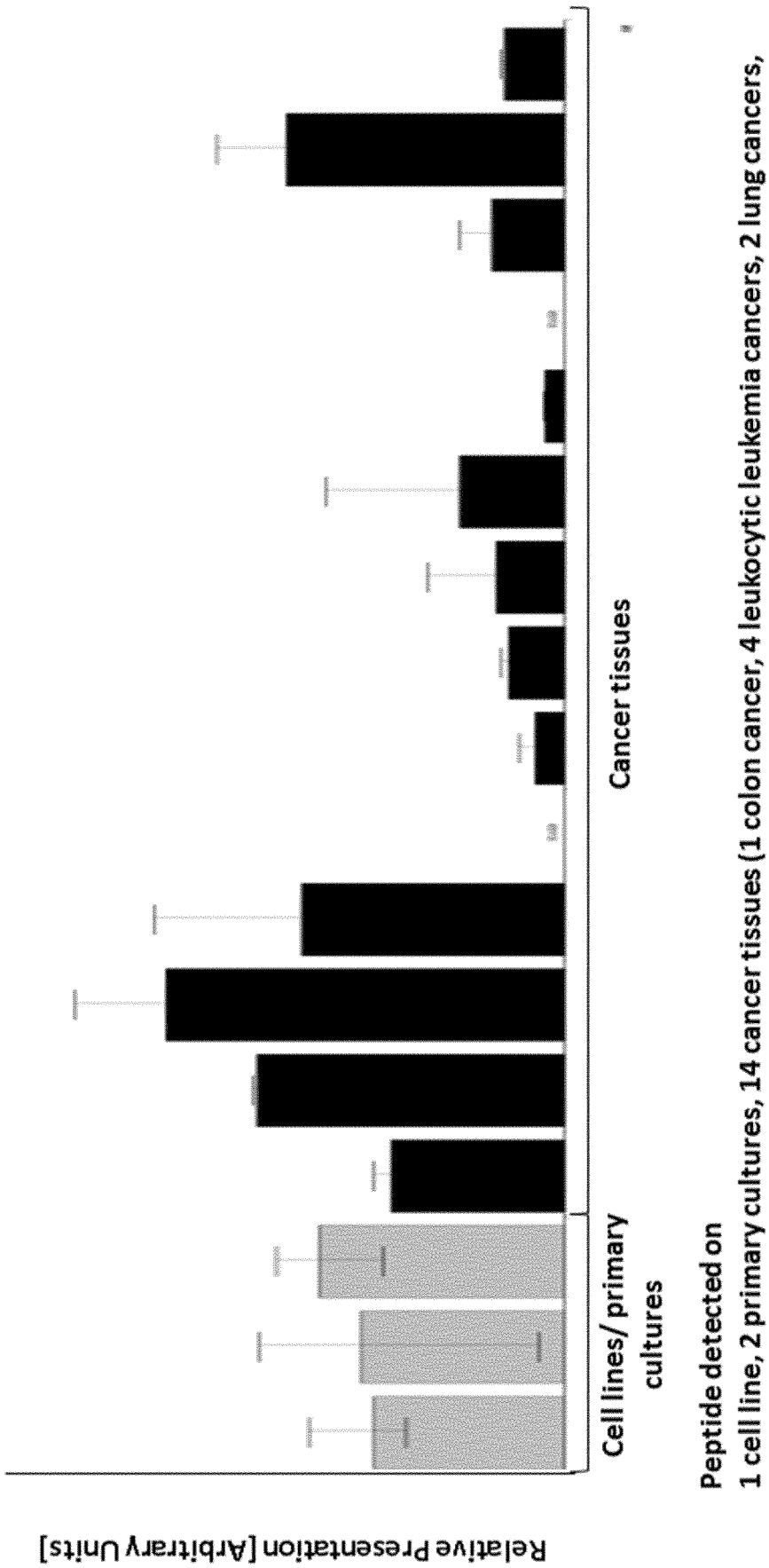


Figure 1V
Peptide: VLLPQETAEIHL (A*02)
SEQ ID NO: 328

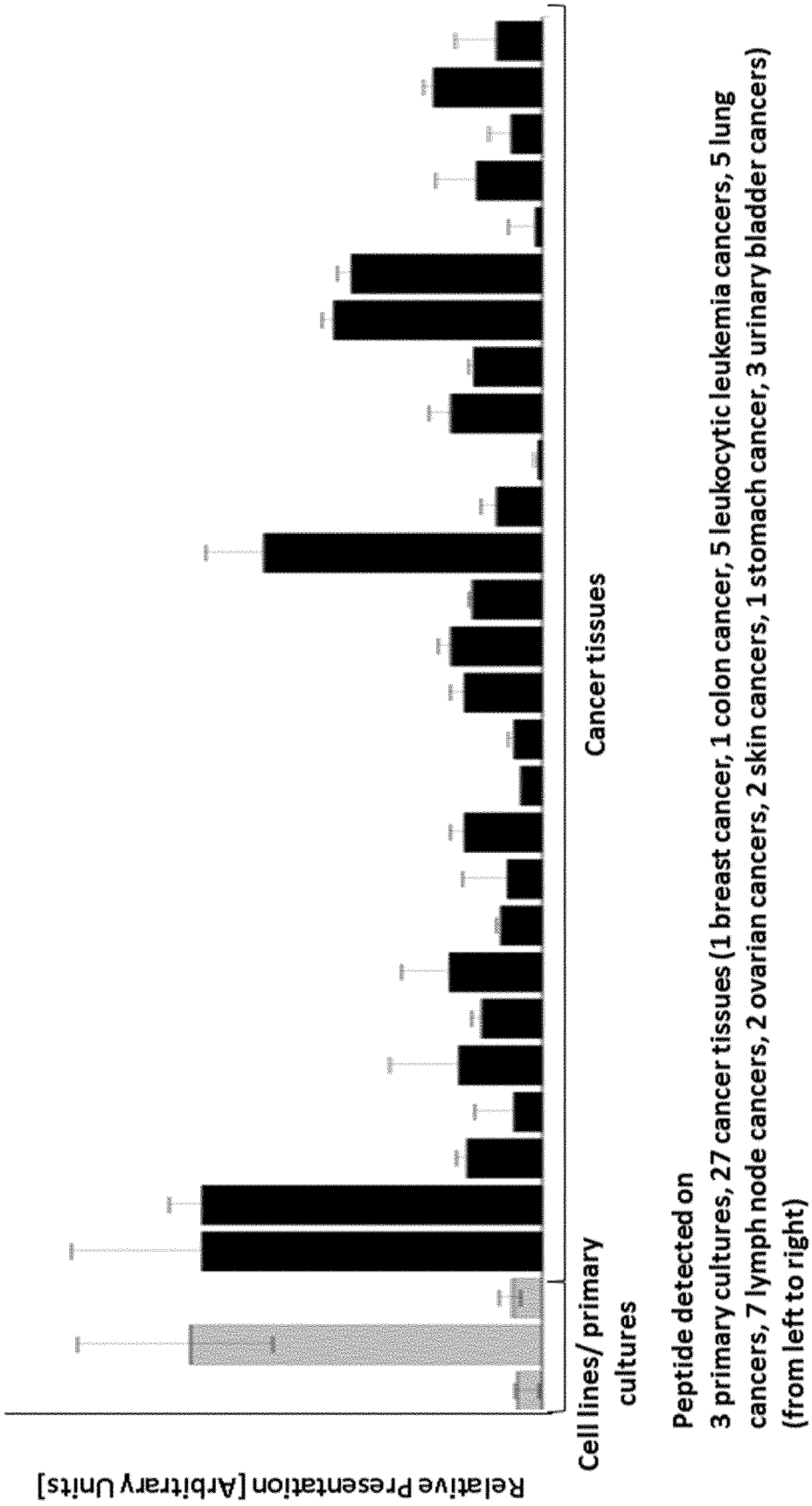


Figure 2A

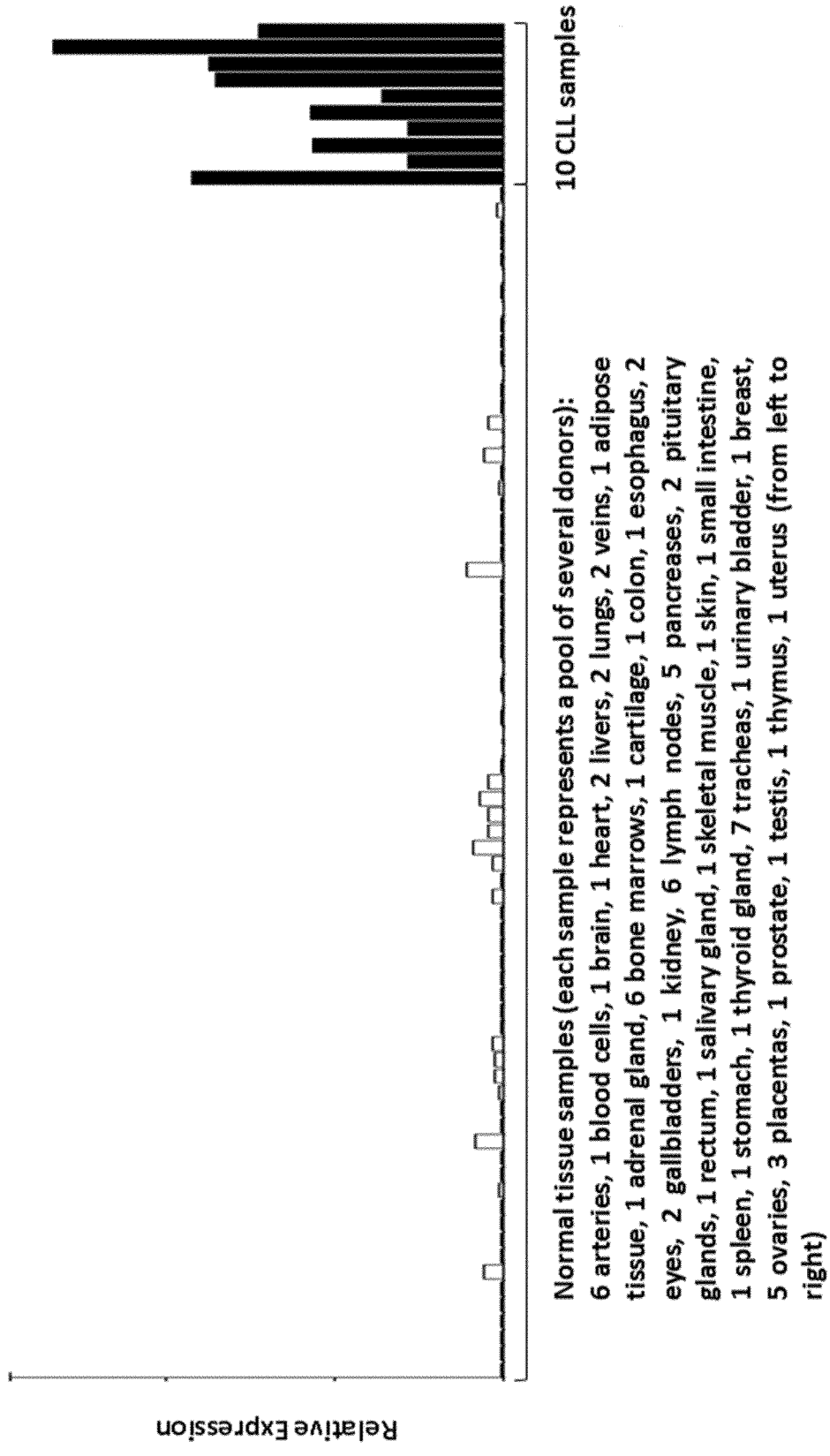

Gene: FCER2
(Peptide: ALWAGLLTL, SEQ ID NO: 21)
Relative Expression
10 CLL samples
Normal tissue samples (each sample represents a pool of several donors):
6 arteries, 1 blood cells, 1 brain, 1 heart, 2 livers, 2 lungs, 2 veins, 1 adipose tissue, 1 adrenal gland, 6 bone marrows, 1 cartilage, 1 colon, 1 esophagus, 2 eyes, 2 gallbladders, 1 kidney, 6 lymph nodes, 5 pancreases, 2 pituitary glands, 1 rectum, 1 salivary gland, 1 skeletal muscle, 1 skin, 1 small intestine, 1 spleen, 1 stomach, 1 thyroid gland, 7 tracheas, 1 urinary bladder, 1 breast, 5 ovaries, 3 placentas, 1 prostate, 1 testis, 1 thymus, 1 uterus (from left to right)

Figure 2B

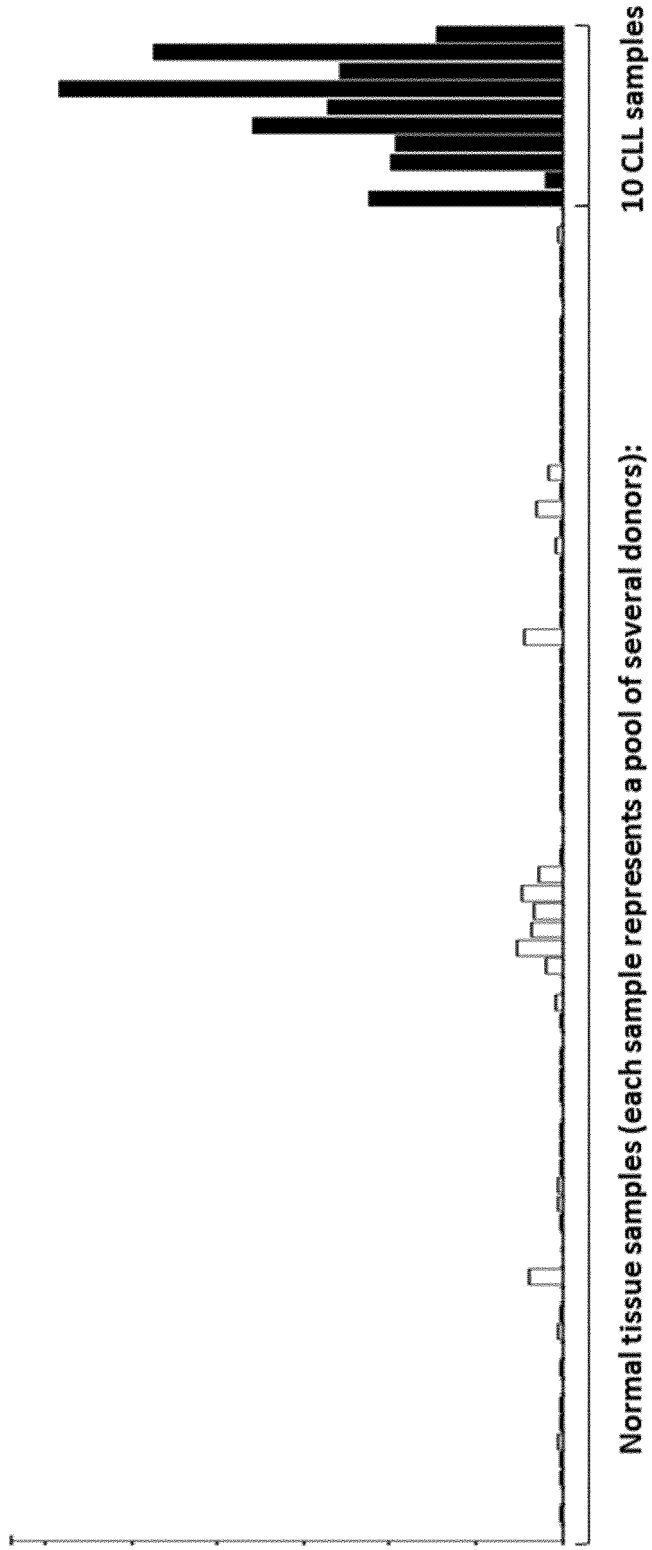

Gene: CLEC17A
(Peptide: GLKHDIARV, SEQ ID NO: 71)
Relative Expression
10 CLL samples
Normal tissue samples (each sample represents a pool of several donors):
6 arteries, 1 blood cells, 1 brain, 1 heart, 2 livers, 2 lungs, 2 veins, 1 adipose tissue, 1 adrenal gland, 6 bone marrows, 1 cartilage, 1 colon, 1 esophagus, 2 eyes, 2 gallbladders, 1 kidney, 6 lymph nodes, 5 pancreases, 2 pituitary glands, 1 rectum, 1 salivary gland, 1 skeletal musde, 1 skin, 1 small intestine, 1 spleen, 1 stomach, 1 thyroid gland, 7 tracheas, 1 urinary bladder, 1 breast, 5 ovaries, 3 placentas, 1 prostate, 1 testis, 1 thymus, 1 uterus (from left to right)

Figure 2C

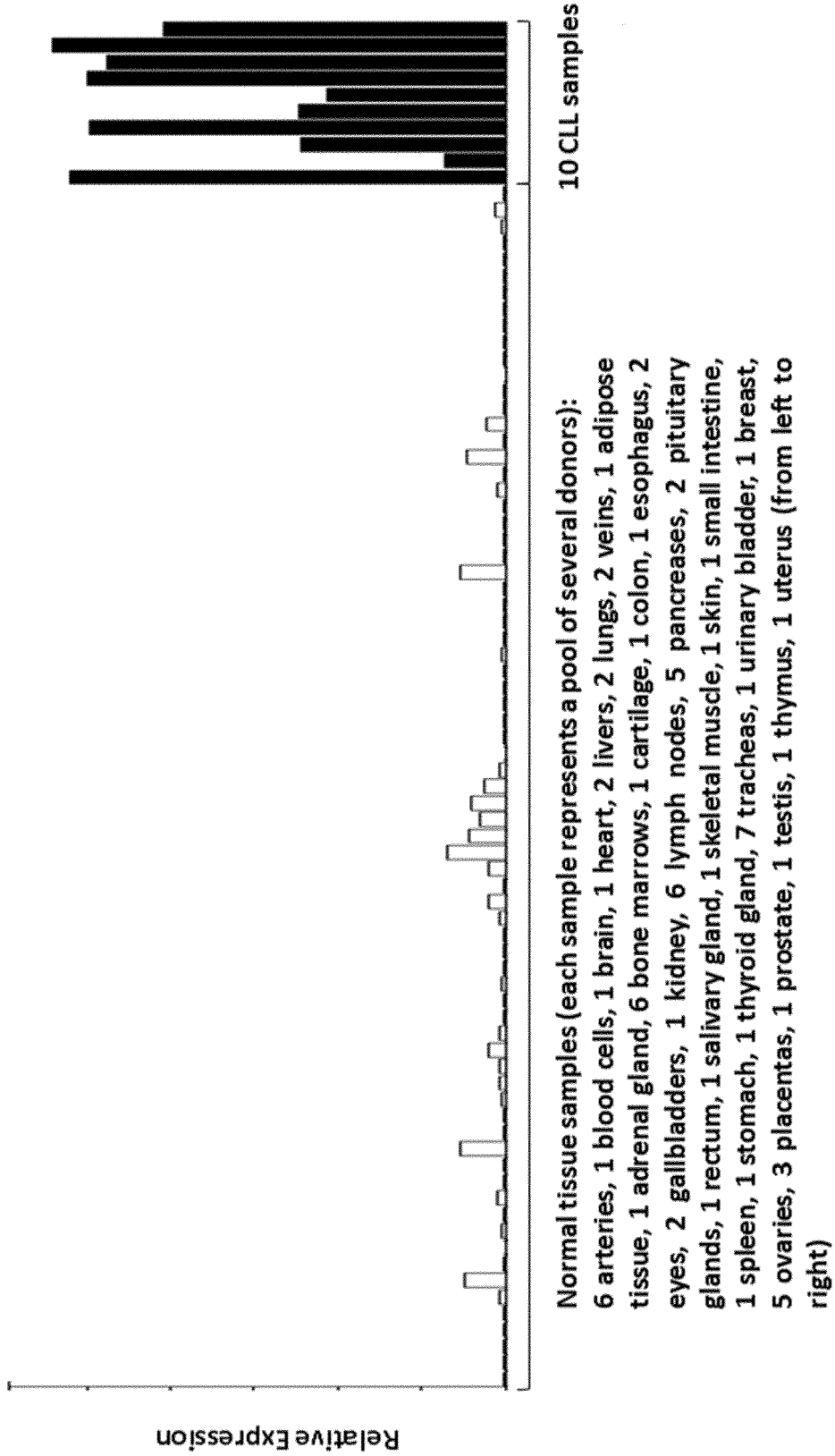

Gene: PAX5
(Peptide: GLDDMKANL, SEQ ID NO: 65)
Relative Expression
10 CLL samples
Normal tissue samples (each sample represents a pool of several donors):
6 arteries, 1 blood cells, 1 brain, 1 heart, 2 livers, 2 lungs, 2 veins, 1 adipose tissue, 1 adrenal gland, 6 bone marrows, 1 cartilage, 1 colon, 1 esophagus, 2 eyes, 2 gallbladders, 1 kidney, 6 lymph nodes, 5 pancreases, 2 pituitary glands, 1 rectum, 1 salivary gland, 1 skeletal muscle, 1 skin, 1 small intestine, 1 spleen, 1 stomach, 1 thyroid gland, 7 tracheas, 1 urinary bladder, 1 breast, 5 ovaries, 3 placentas, 1 prostate, 1 testis, 1 thymus, 1 uterus (from left to right)

Figure 2D

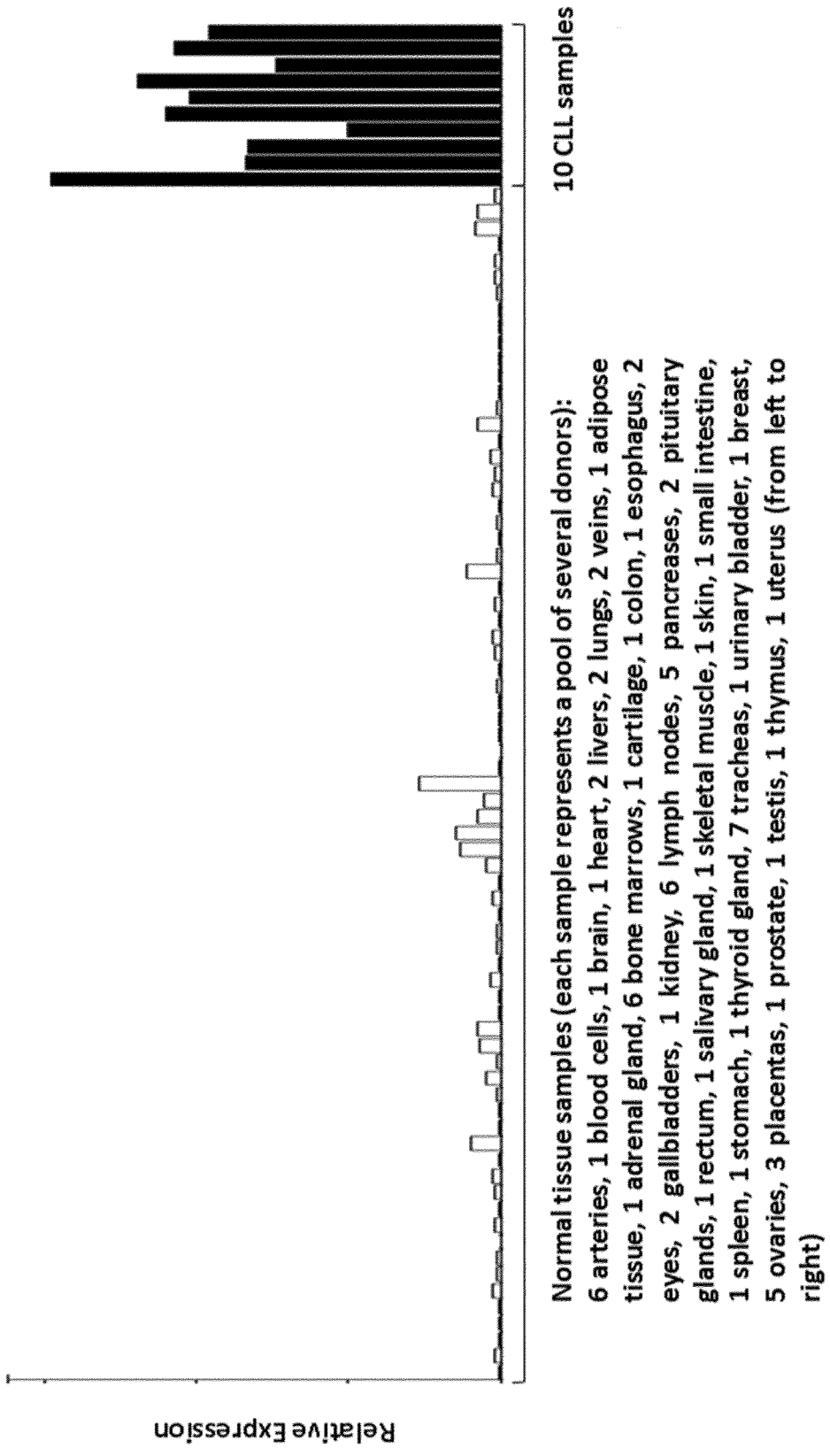

Gene: KIAA0226L
(Peptide: GIIDGSPRL, SEQ ID NO: 62)
Relative Expression
10 CLL samples
Normal tissue samples (each sample represents a pool of several donors):
6 arteries, 1 blood cells, 1 brain, 1 heart, 2 livers, 2 lungs, 2 veins, 1 adipose tissue, 1 adrenal gland, 6 bone marrows, 1 cartilage, 1 colon, 1 esophagus, 2 eyes, 2 gallbladders, 1 kidney, 6 lymph nodes, 5 pancreases, 2 pituitary glands, 1 rectum, 1 salivary gland, 1 skeletal musde, 1 skin, 1 small intestine, 1 spleen, 1 stomach, 1 thyroid gland, 7 tracheas, 1 urinary bladder, 1 breast, 5 ovaries, 3 placentas, 1 prostate, 1 testis, 1 thymus, 1 uterus (from left to right)

Figure 3

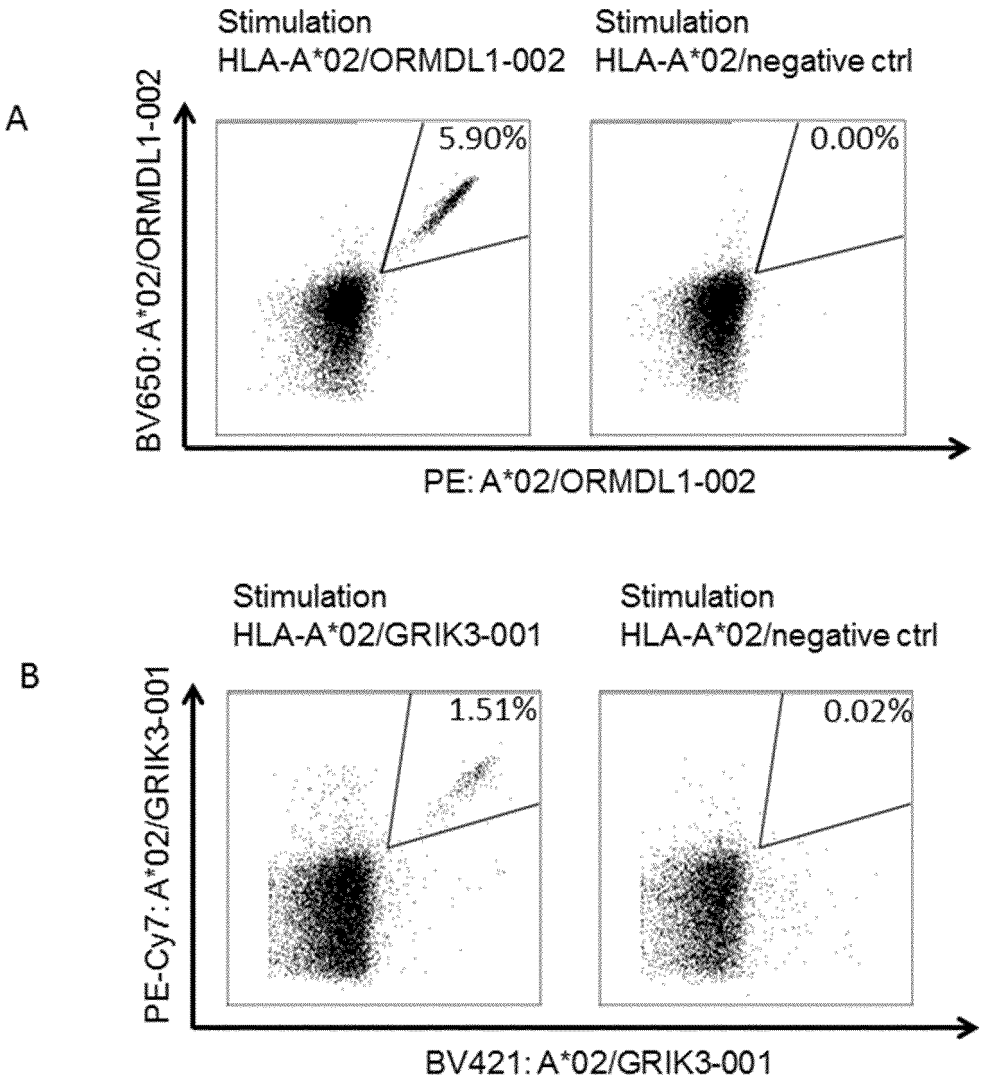

A
Stimulation
HLA-A*02/ORMDL1-002
Stimulation
HLA-A*02/negative ctrl
5.90%
0.00%
BV650: A*02/ORMDL1-002
PE: A*02/ORMDL1-002
B
Stimulation
HLA-A*02/GRIK3-001
Stimulation
HLA-A*02/negative ctrl
1.51%
0.02%
PE-Cy7: A*02/GRIK3-001
BV421: A*02/GRIK3-001

Figure 3

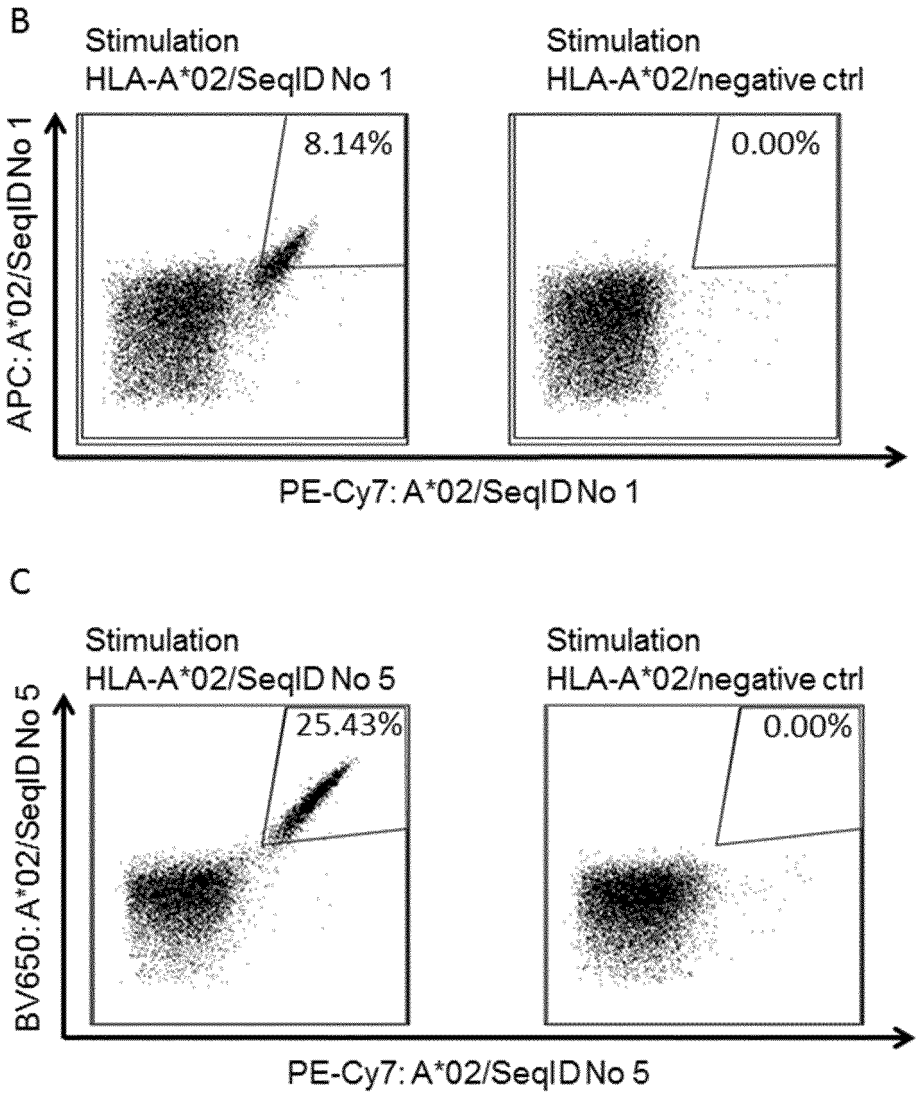
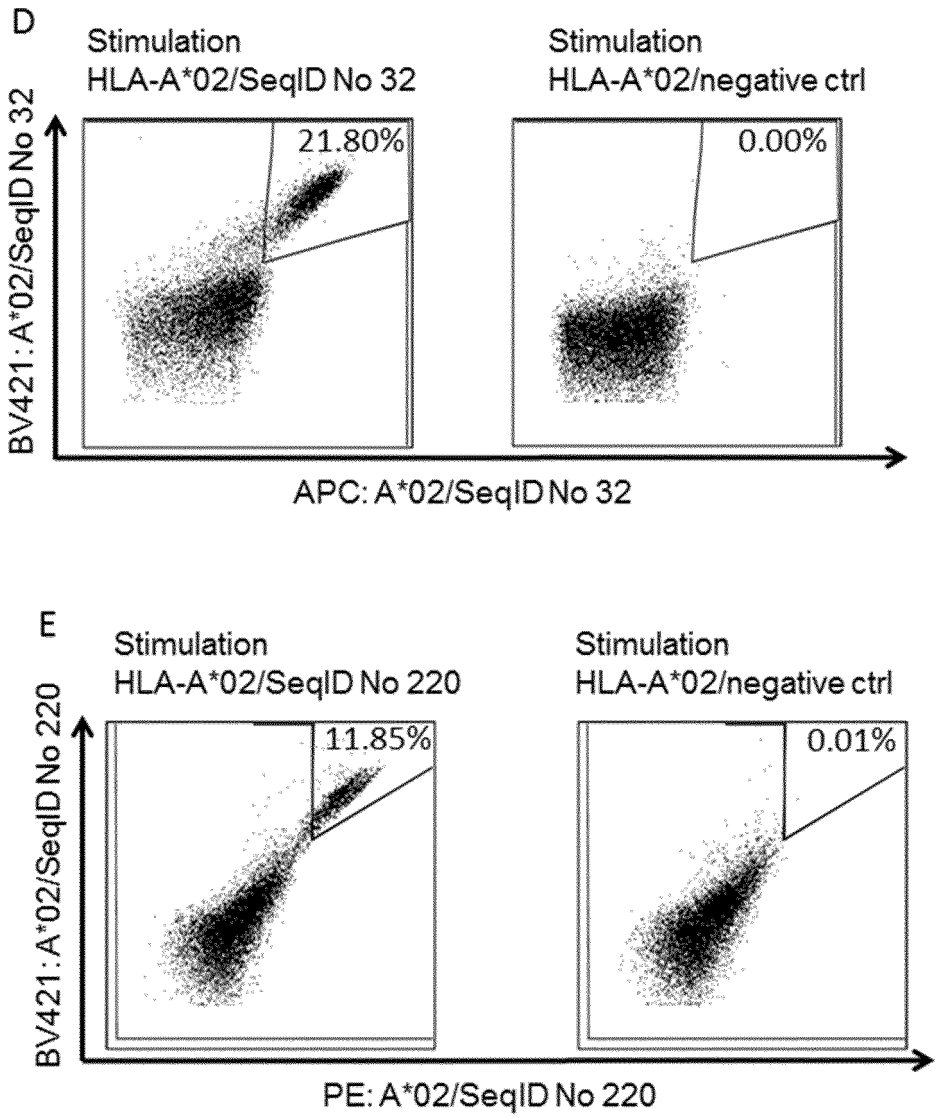

B
Stimulation
HLA-A*02/SeqID No 1
Stimulation
HLA-A*02/negative ctrl
8.14%
0.00%
APC: A*02/SeqID No 1
PE-Cy7: A*02/SeqID No 1
C
Stimulation
HLA-A*02/SeqID No 5
Stimulation
HLA-A*02/negative ctrl
25.43%
0.00%
BV650: A*02/SeqID No 5
PE-Cy7: A*02/SeqID No 5

Figure 3


D
Stimulation
HLA-A*02/SeqID No 32
Stimulation
HLA-A*02/negative ctrl
21.80%
0.00%
BV421: A*02/SeqID No 32
APC: A*02/SeqID No 32
E
Stimulation
HLA-A*02/SeqID No 220
Stimulation
HLA-A*02/negative ctrl
11.85%
0.01%
BV421: A*02/SeqID No 220
PE: A*02/SeqID No 220