Cluster ID #

AA monomer	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
valol	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
val	0	0	2	57	1	1	0	8	0	1	0	0	0	5	1	4
tyr	0	0	0	0	0	5	1	18	1	1	0	0	4	2	1	0
trp	0	0	0	0	0	2	0	15	3	1	0	0	1	2	0	0
thr	1	2	0	0	56	0	0	3	0	0	0	0	0	0	0	0
ser|thr	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ser	76	2	0	0	2	0	0	0	0	0	0	0	0	1	0	1
pro	1	0	1	0	0	30	1	3	2	0	0	0	0	0	0	3
piz	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
pip	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
phgly	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
phe|tyr	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
phe|trp	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
phe	0	0	0	1	1	5	0	16	1	1	0	0	0	1	0	0
pac	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
orn	1	0	0	0	0	0	0	0	3	0	9	0	0	0	6	0
oh−orn|orn	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
oh−orn	0	0	0	0	0	0	0	3	0	0	0	0	6	0	3	0
oh−asp	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0
oh−asn	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
o−iv	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
norcma	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
noh−val	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
noh−ala	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
nme−gly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
nme−asp	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
ncp−ala	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
met	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
me−dpr	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
me−bala	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
lys	2	0	0	0	1	1	0	8	0	0	4	1	2	0	1	0
leu|val	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
leu	4	0	0	10	1	3	2	8	0	63	0	1	1	8	0	3
kyn	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
iso	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
ile|val	0	0	0	1	1	0	0	1	0	0	0	1	0	2	0	1
ile	0	0	0	8	1	0	0	0	0	2	0	0	0	18	0	0
htyr	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1
hse	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0
hpg	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0
homm−tyr	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
hiv	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
his	0	0	0	0	0	1	0	6	0	0	0	0	0	0	0	0
hcn	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
goh−val	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
glyco−cya	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
gly|nme−gly	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
gly	0	0	1	0	0	0	0	0	1	0	0	55	0	0	0	2
glu	8	0	0	0	0	0	0	6	2	0	0	0	0	0	7	0
gln|tyr	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
gln	7	0	0	0	0	0	1	2	3	1	0	0	0	0	7	3
gca	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
gac	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
fo−oh−orn	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
di−oh−bz|sal	0	0	0	0	3	0	0	0	2	0	0	0	0	0	0	0
di−oh−bz	0	0	0	0	3	1	0	0	2	0	0	0	0	0	0	0
dhpg	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0
dhh−tyr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
dhdab	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
dhabu|dhtyr|thr	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
dhabu	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
dh−thr	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
dab	1	0	0	0	4	0	0	0	6	0	9	0	0	0	0	0
d−lea	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
d−ala	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1
cysa	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
cys	3	38	0	1	0	0	0	0	9	0	0	0	0	0	0	0
cl2−hpg|hpg	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0
btrp	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
boh−tyr|tyr	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
boh−tyr	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
bmt	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
bme−phe	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
blys	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0
bhceala	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
bala	3	2	0	0	0	0	0	0	0	0	0	1	1	0	0	0
athr|thr	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
athr|ser	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
athr	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0
asp|nme−asp	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
asp|bme−asp	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
asp	0	0	0	0	2	0	0	1	14	0	0	0	5	0	3	0
asn|gln	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
asn	0	0	0	0	0	0	0	0	3	0	0	0	32	0	0	0
arg|lys	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
arg|leu	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
arg	4	0	0	0	0	0	0	5	0	0	1	0	1	0	0	0
ame−ser	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
alaol	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
ala|val	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ala|leu|val	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
ala|gly	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ala	5	0	26	4	9	2	1	2	3	4	0	3	0	0	0	7
akiv	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
akic	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
aile|ile	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ahnpb	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
aeo	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
ac−phe	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
abu|ival	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7
abu	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
aad	0	0	1	0	0	0	0	5	0	1	0	0	0	0	0	3
6cl−trp|trp	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
6cl−hic	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4pe−pro	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4p−pro	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4oh−pro	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
4oh−5oh−orn	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
4me−pro|pro	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0
4me−pro	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3oh−leu	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
3oh−gln	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3oh−3me−pro	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
3me−tyr|ddh−arg	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3me−tyr	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0
3me−pro	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
3me−glu|glu	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
3me−asp	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0
33p−ala	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
2cl−hpg|hpg	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

Freq

60

40

20

0