```
Conservation Threshold: 2 (Maximum: 3)
Number of gaps ignored: 2
Percentage of unusual residues ignored: 12%
Sub-group A, sequences: 1 to 10
Sub-group B, sequences: 23 to 33
Sub-group C, sequences: 45 to 55
Sub-group D, sequences: 67 to 77
```

1

## Identity between all sub-groups

(36) ALL [R]

## Identity between sub-group pairs

(10) $A, B[D]$
(25) $A, D[D]$
(26) $A, B[E]$
(70) $A, D[E]$

## Identity within one sub-group

(31) $\mathrm{B}[\mathrm{E}] \mathrm{C}[\mathrm{R}]$
(38) C [E]
(40) C [D]
(41) $A[R]$
(57) B [E]
(64) $D[E]$
(68) C [D]
(2)

Conservation between all sub-groups
NONE

Conservation between sub-group pairs

| (10) | A,D (2) B,D (2) | $A-[D] D-[D]$ $B-[D] D-[D]$ | Cons: Negative Charged Cons: Negative Charged | Diff: |
| :---: | :---: | :---: | :---: | :---: |
| (64) | B,C (2) | $\mathrm{B}-[\mathrm{D}] \mathrm{C}-[E D]$ | Cons: Negative Charged | Diff: |
|  | B,D ( 2) | B-[D] D-[E] | Cons: Negative Charged | Diff: |
|  | C,D (2) | C-[ED] D-[E] | Cons: Negative Charged | Diff: |
| (71) | B,C (2) | $\mathrm{B}-[\mathrm{KR}] \mathrm{C}-[\mathrm{K}]$ | Cons: Positive Charged | Diff: |

## Difference between sub-group pairs



Conserved within one sub-group

| ( 8) D (2) | D-[ED] | Cons: Negative <br> Charged |
| :--- | :--- | :--- |
| (12) C (2) | C-[ED] | Cons: Negative <br> Charged |
| (15) B (2) | B-[KR] | Cons: Positive <br> Charged |
| (19) C (2) | C-[K] | Cons: Positive <br> Charged |
| (21) D (2) | D-[KR] | Cons: Positive <br> Charged |
| (43) D (2) | D-[HKR] | Cons: Positive <br> Charged |
| (45) C (2) | C-[KR] | Cons: Positive <br> Charged |
| (54) A (2) A-[KR] | Cons: Positive <br> Charged |  |
| (59) B (2) | B-[D] | Cons: Negative <br> Charged |
| (61) A (2) A-[K] | Cons: Positive <br> Charged |  |

Figure 5b

