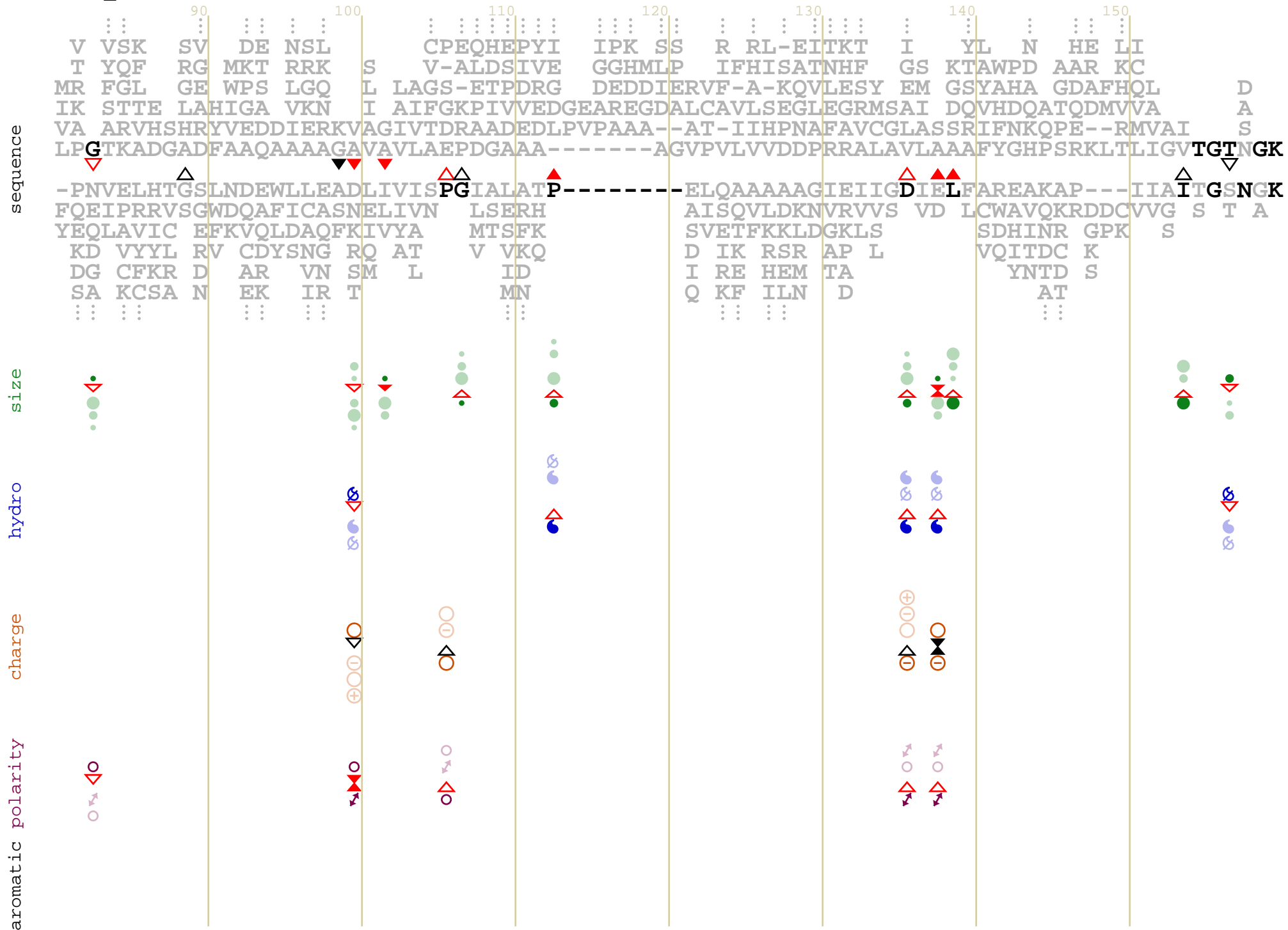
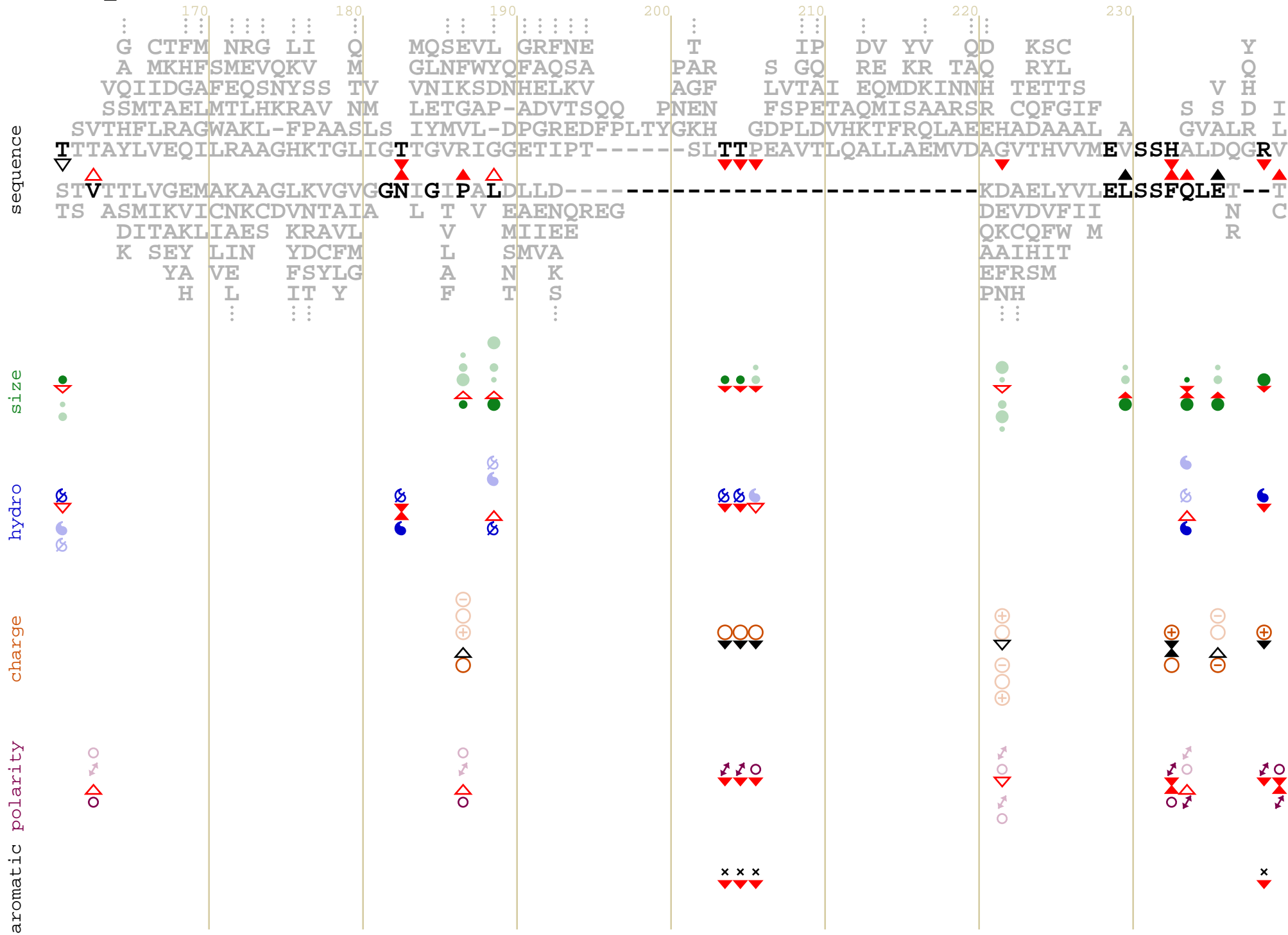


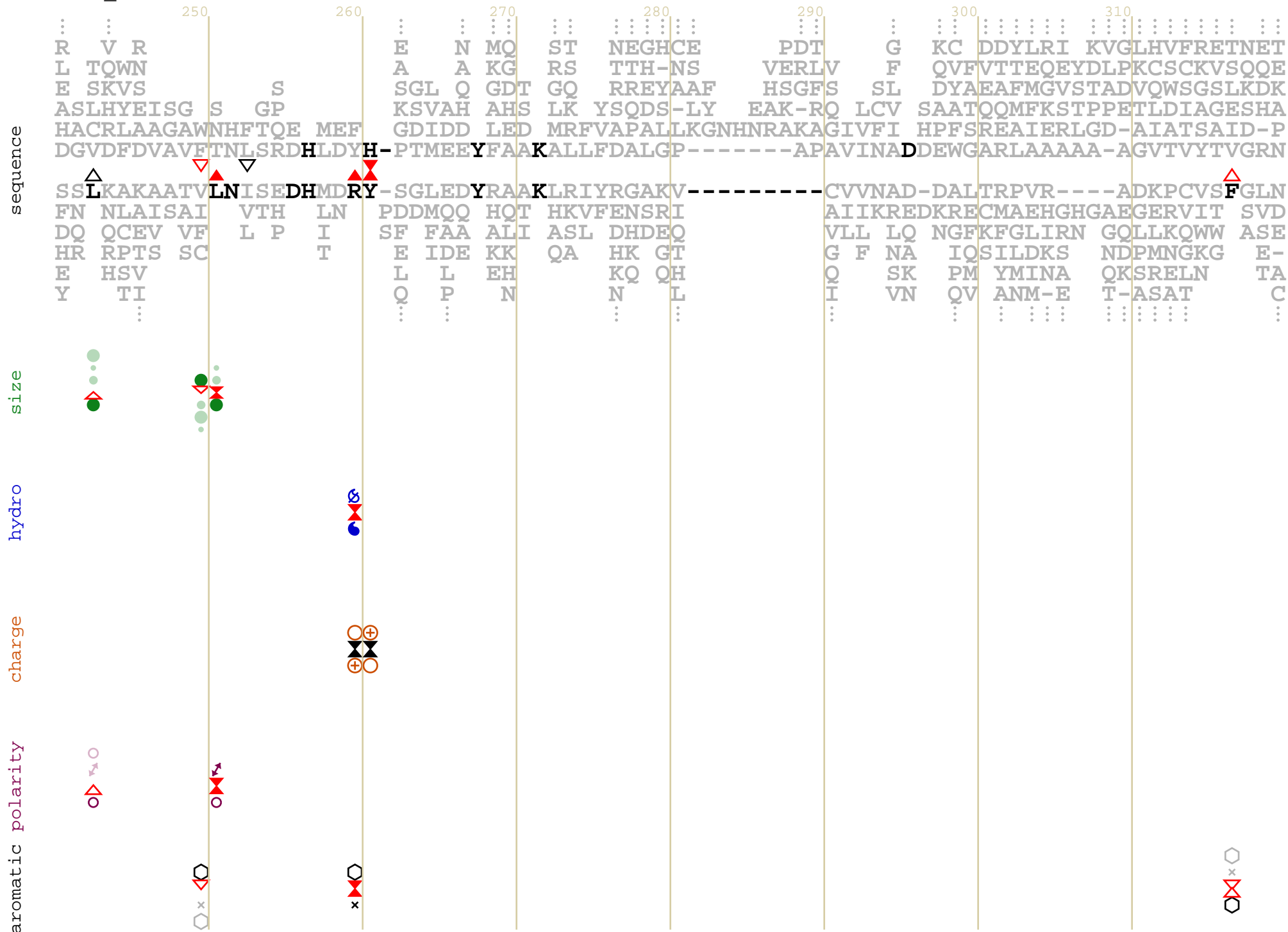
MurE_D



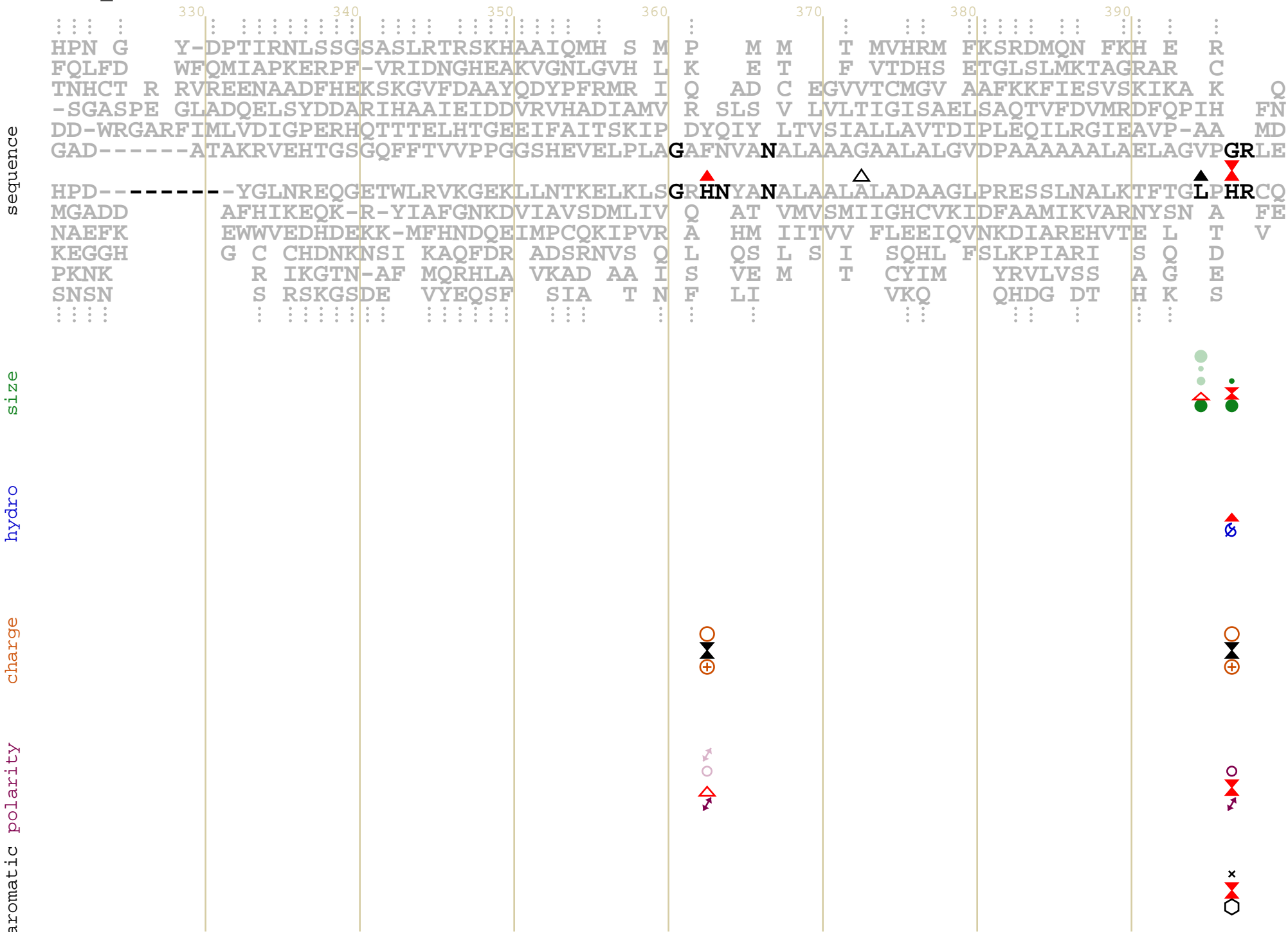
MurE_D



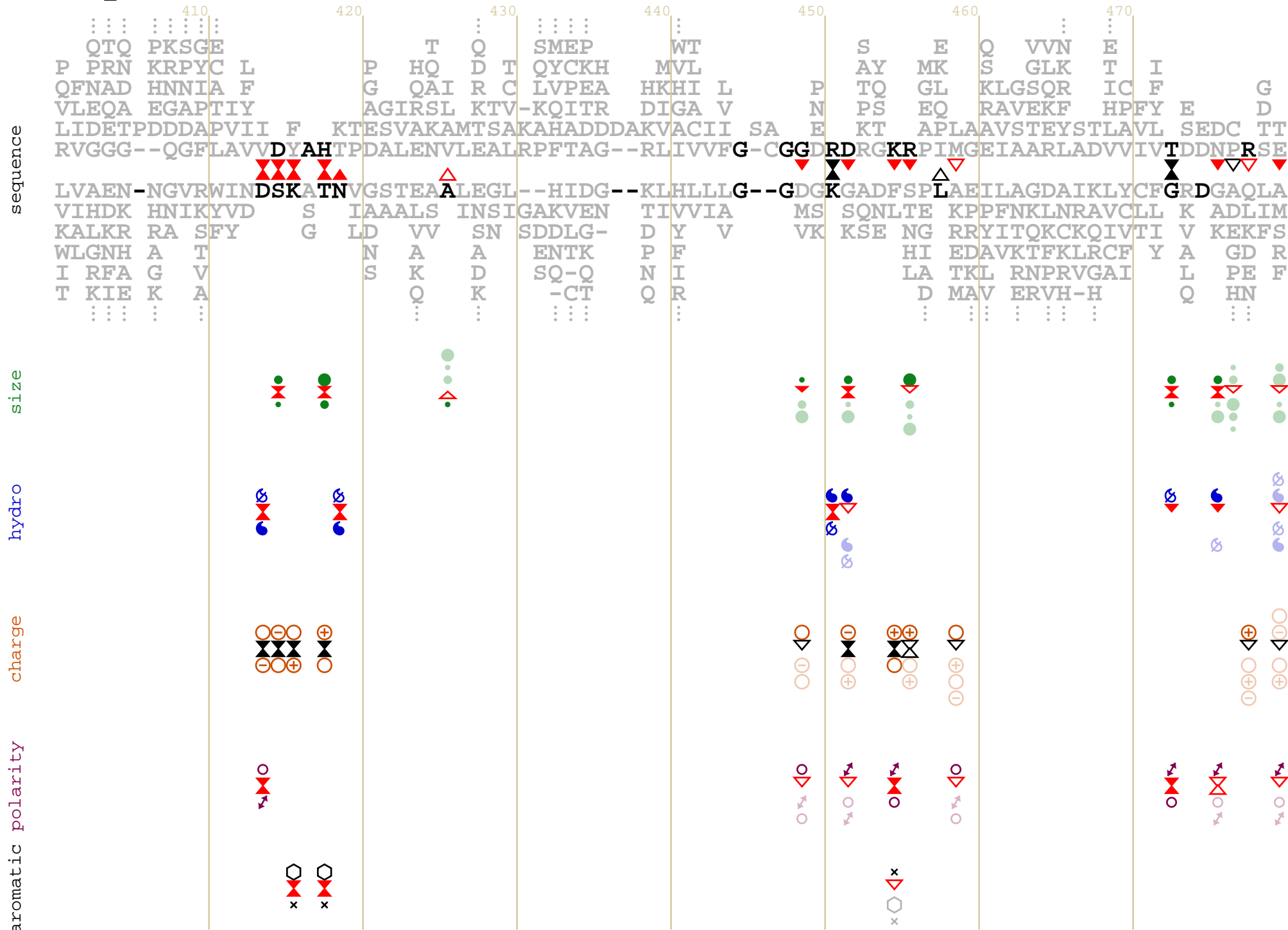
MurE_D



MurE_D



MurE_D



MurE_D

490 500 510 520 530 540 550

```

...
Q RD T PTKTAC HE V K QC TN RQ C V T AQ F H N Q
P QV NQ TQ T MERPVSPFRRMR I LY LK EH A P RR KK C QC LK- L
ELLR VST VHT R SSFSHANGNPLMQI ED AT GE SKS G Q LG TDRRD VLATERV-K
NADQ IRAVER- RQAEVEKEEDVQYVSFAG KQ FQVLEQMGEN IIVL ET DLRSIKIAYN AVQLKQIFE
VGET LDEMMEAQAQAIPDGRAEVIVEEN RA VHHLISWLQAD VLII P DYLEIANEVLHWS EHAVAAECIT
DPAAIRADILAG-----AAG-----ATEIGDRAEAIRAAVAMAKPGDTVLVAGKGHEITGQIVGGVTHPFD DREEVRAALA

```

sequence

```

ALLPD-----S-----IRFETMEEAVQLIAPQAQPGDMVLLSPACASLDQFKNFEEERGDVFAK-----LA
KAREEA APN LQQTDSLADVIRQASELLKS I M G S FGMYSGYMA SNE TRLAQALAV
PDHGGK VL MTDVANVDQIMEKLRKRVEA A K AS AQ EL IQ QF
QISDSC D VICKR KASAIHCYATITE V R D KH RD RE SI
RFAHI G -KAN QH AASKQH LH R R K A VG H S
E KKKV H ELNS GK KFV SK NR T
...

```

size

hydro

charge

polarity

aromatic

MurE_D

570

```

: : : : : : : : : : : :
QSTEQAPIS
PMDNEHIDRT
KK--REERPSTR
GTQKNKVPLPGGACQ
ALEGLGLKAGDEEGK
ERLA-----

KELA-----
EQIGGEASADV
QAY-H
RCSDS
GK T
G I
...

```

sequence

size

hydro

charge

aromatic polarity

Residue Properties/Symbol Key

residue	AGPST	DENQ	HKR	ILMV	FWY	C	
size	•••••	•••••	•••••	•••••	•••••	•	●large ●small •tiny
hydrophobicity	⊗ ⊗⊗	⊗⊗⊗	⊗⊗⊗	⊗⊗⊗⊗	⊗⊗⊗	⊗	⊗hydrophobic ⊗hydrophilic
charge	○ ○ ○ ○ ○	⊖ ⊖ ○ ○	⊕ ⊕ ⊕	○ ○ ○ ○ ○	○ ○ ○	○	⊕positive ○neutral ⊖negative
polarity	○ ○ ○ ↗ ↗	↗ ↗ ↗ ↗	↗ ↗ ↗	○ ○ ○ ○ ○	○ ↗ ↗	↗	↗polar ○nonpolar
aromaticity	x x x x x	x x x x	⬡ x x	x x x x	⬡ ⬡ ⬡	x	⬡aromatic xnon-aromatic

User settings:

Alignment file: MurE_D_MSA.aln

Top group rows 1-25; Bottom group rows 26-45

Property track display settings:

size: if in main track

hydro: if in main track

charge: if in main track

polarity: if in main track

aromatic: if in main track

Conservation level: all or all but one

Don't flag conserved residue property differences in main track with orange circles

Grayscale function: flat

Darkness adjustment: 0.25