

Validated GPCR protein sequences

align

PVRQN-GCCMA-KMVL SVWLLSASITLPP-L--FG-WAQ
NTRY S-SKRRVTVMIAIVWVLSFTISCPL-L--FG-LNN
SPTAR-MWPSLCLALQTLWRTHQKESSE R-L--FD-LYK
GTGQS-SCRRVAFMITAVWVLAFAVSCPL-L--FG-LNT
RSLQNKRSHTV-VSIA SVWVFSFLLYGPVIL----SWKN

assign residues to GPCR domain

```

IIIII-I MMMM-MMMMMMMMMMMMMMMMMMMMM-M--ME-EEE
IIIII-I III MMMMMMMMMMMMMMMMMMMMMMM-M--MM-MEE
IIMMM-MMMMMMMMMMMMMMMMMMMMMMEEEEE-E--EE-EEE
IIIII-I III MMMMMMMMMMMMMMMMMMMMMMM-M--MM-MEE
IIIIII III MM-MMMMMMMMMMMMMMMMMMMMM-----MEEE

```

✓
✓
✗
✓
✓

IIIIIIIIIMMMMMMMMMMMMMMMMMMMMMMMOOO

consensus domains

remove highly discordant sequences

yes

sequences removed?

no

**alignment
completed**