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Sequence alignment of FLC proteins from various species. The alignment shows conservation across the protein length, with highly conserved regions highlighted in yellow. Key residues are numbered at the top: 20, 40, 60, 80, 100, 120, 140, 160, 180, and 200. The sequences are grouped by species and labeled with their respective FLC accessions.

| Species              | FLC Accession    | Sequence   |
|----------------------|------------------|--|
| Thlaspi arvense      | MN106 FLC        | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDKYDFSSSGLVKILD 75              |
| Thlaspi arvense      | MN111 FLC        | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDKYDFSSSGLVKILD 75              |
| Thlaspi arvense      | MN108 FLC        | MGEKKTTRNQAN-----SGKLYSFSSGD----- 11   |
| Arabidopsis thaliana | FLC              | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDN-----LVKILD 68                |
| Capsella rubella     | FLC AFV28913.1   | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDN-----LVKILD 68                |
| Arabidopsis lyrata   | FLCAFV33319      | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDN-----LVKILD 68                |
| Camelina sativa      | FLC XP_010453038 | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDN-----LVKILD 68                |
| Eutrema halophilum   | FLC AY957537     | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDN-----LVKILD 68                |
| Brassica rapa        | FLC ABI29999     | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDN-----LVKILD 68                |
| Brassica napus       | FLC AAK70215     | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSA SGKLYSFSSGDN-----LVKILD 68                |
| Arabis alpina        | PEP1 ACQ44228    | MGRKKLEIKRIENKSSRQVTFSKRRNGLIEKARQLSVLCDASVALLVVSSGKLYSFSSGDN-----LVKILD 68                  |
| Thlaspi arvense      | MN106 FLC        | RYGKQHADDLKALDLQSKALNYGSHHELLELVESKLVESD VDNVSVDSL VVQLEDHLETALSITRAKTEMLKLV 150             |
| Thlaspi arvense      | MN111 FLC        | RYGKQHADDLKALDLQSKALNYGSHHELLELVERKLVESD VDNVSVDSL VVQLEDHLETALSITRAKTEMLKLV 150             |
| Thlaspi arvense      | MN108 FLC        | ----- 11   |
| Arabidopsis thaliana | FLC              | RYGKQHADDLKALDHQS SKALNYGSHYELLELVD SKL VGS N VNSV S VDSL VVQLEDHLETALSITRAKTEMLKLV 143      |
| Capsella rubella     | FLC AFV28913.1   | RYGKQHADGLKALDLQSKS LNYGSHHELL D L VESKL VESNV S VDSL VVQLEDHLETALSITRAKTEMLKLV 143          |
| Arabidopsis lyrata   | FLCAFV33319      | RYGKQHADDLKALDMQSK ALNYGSHHELL E L VESKL VGS N VNSV SAETL L QLE K HLETALSITRAKTEMLKLV 143    |
| Camelina sativa      | FLC XP_010453038 | RYGKQHADDLKALDLQSKAL NYGSHHELL E L VESNL VESNV N VNSV DD L VQLEEHLETALSITRAKTEMLKLV 143      |
| Eutrema halophilum   | FLC AY957537     | RYGKQHADDLKALDLQSKAL SYGSHHELL E L VESQL VDS SV DNA S VDSL A QLEDHLETALSITRAKTEMLKLV 143     |
| Brassica rapa        | FLC ABI29999     | RYGKQHDDDLKALDRQSK ALDCG SHHELL E L VEGK L EESNV DNV S V G S LVQLEEHLEN AL SVTRAKTEMLKLV 143 |
| Brassica napus       | FLC AAK70215     | RYGKQHDDDLKALDRQSK ALDCG SHHELL E L VESKL EESNV DNV S V G S LVQLEEHLEN AL SVTRAKTEMLKLV 143  |
| Arabis alpina        | PEP1 ACQ44228    | RYGKR HADDLKALDLQSKALNYGSHHELL E I VESKL VAPVN NV SFDT L VQLEK HLETAL AV RAKTEMLKLV 143      |
| Thlaspi arvense      | MN106 FLC        | DSLKEKEKLLKEENQVLA SQMEKN- HMEADAD- NMEMSPGQI SDMNL PVT LPLL N*----- 204                     |
| Thlaspi arvense      | MN111 FLC        | DSLKEKEKLLKEENQVLA SQMEKN- HMEADAD- NMEMSPGQI SDMNL PVT LPLL N----- 203                      |
| Thlaspi arvense      | MN108 FLC        | ----- 11   |
| Arabidopsis thaliana | FLC              | ENLKEKEKMLKEENQVLA SQMENN HHVGAEA- - EMEMSPAGQI SDNL PVT LPLL N----- 196                     |
| Capsella rubella     | FLC AFV28913.1   | ENLKEKEKLLKEENQVLA SQMGK NHVVGAETEMMEMSPAGQI SDNL PVT LPLL N----- 198                        |
| Arabidopsis lyrata   | FLCAFV33319      | ENLKEKEKLLKEENQVLA SQMEKN HHVGAEA- - EME I SPAGQI SDNL PVT LPLL N----- 196                   |
| Camelina sativa      | FLC XP_010453038 | ENLKEKEKLLKEENQVLA RQMET NHV VGAEADMEMEMSPAGQI SDNL PVT LPLL N----- 198                      |
| Eutrema halophilum   | FLC AY957537     | DSLKEKEKLLK RENQVLA SQMEKNQHVGA EAD- NMEMSPGQI SD SNL PVT LPLL N----- 197                    |
| Brassica rapa        | FLC ABI29999     | ENLKEKEKLL EENHV LA SQMEK SNL VRA EAD- NM DV SPGQI SD INLP VT LPLL KGGLVGV EFL 206           |
| Brassica napus       | FLC AAK70215     | ENLKEKEKLL EENHV LA SQMEK SNL VRA EAD- NM DV SPGQI SD INLP VT LPLL ----- 197                 |
| Arabis alpina        | PEP1 ACQ44228    | ESLKEKEKLLKEENQVLA SQMEK KTL V GA EAD D NME I SPGE I SD INLP VT LPLL N----- 198              |