

MHC Class 1 Molecules

- Present **linear foreign peptides which are most commonly 9 or 10 amino acids long**
- Anchor sites (2 and 9) are usually important for binding and recognition
- Mutations which alter the peptide can hinder or prevent **CTL response** activation

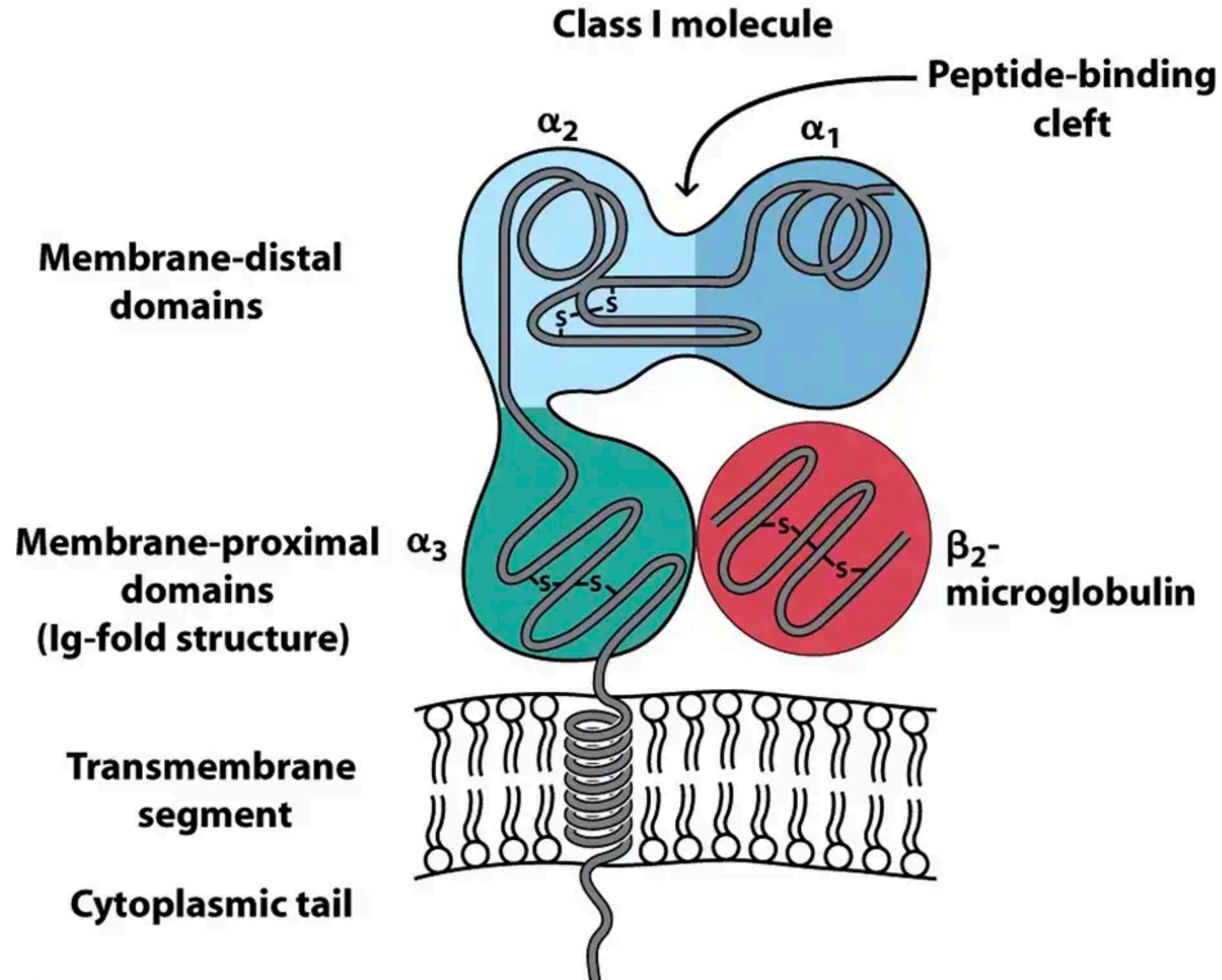


Figure 8-3
Kuby IMMUNOLOGY, Sixth Edition
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Rapid SIV sequence evolution in macaques in response to CTL-driven selection

- **SIV: the only animal model of HIV (rhesus macaques)**
- Experimental infection with MHC-matched strain of SIV
- **Virus sequenced from a sample 2 weeks post infection**
- **Only variation was in an epitope recognized by the MHC - CTL *escape***

