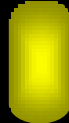


Antijen İşlenmesi & Sunulması

ekzojen antijen

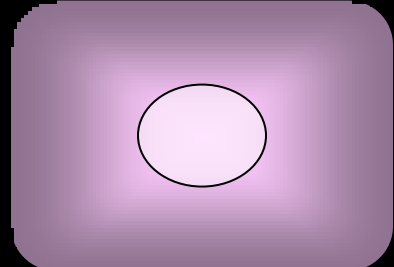


endojen antijen



profesyonel antijen sunan hücreler

tüm çekirdekli hücreler



MHC

sınıf II

sınıf II

MHC

sınıf I

TCR

TCR

yardımcı T hücre

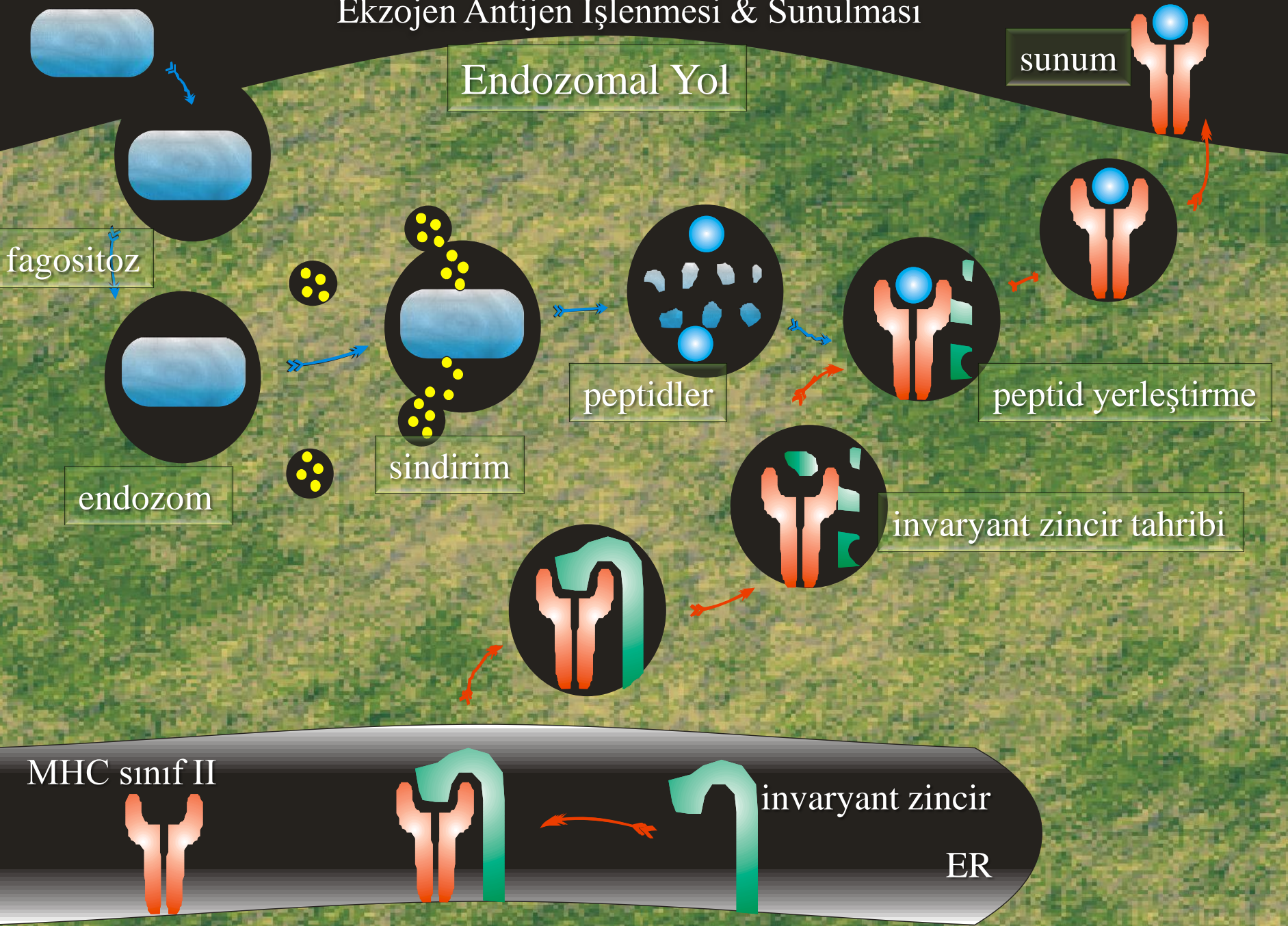
yardımcı T hücre

yardımcı T hücre

sitotoksik T hücre

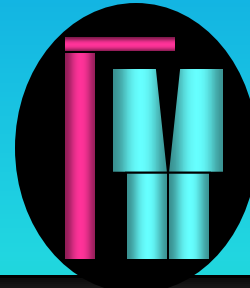
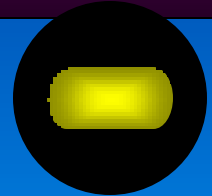
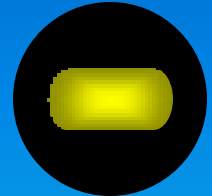
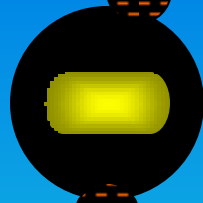
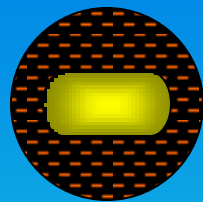
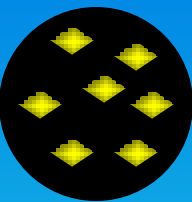
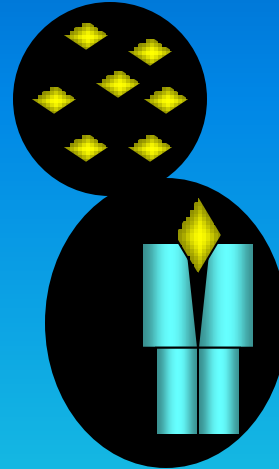
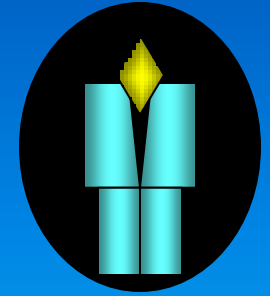
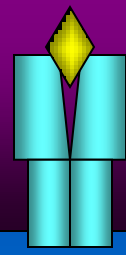
Ekzojen Antijen İşlenmesi & Sunulması

Endozomal Yol



Ekzojen Antijen İşlenmesi (endozomal yol)
Sunulması (MHC sınıf II)

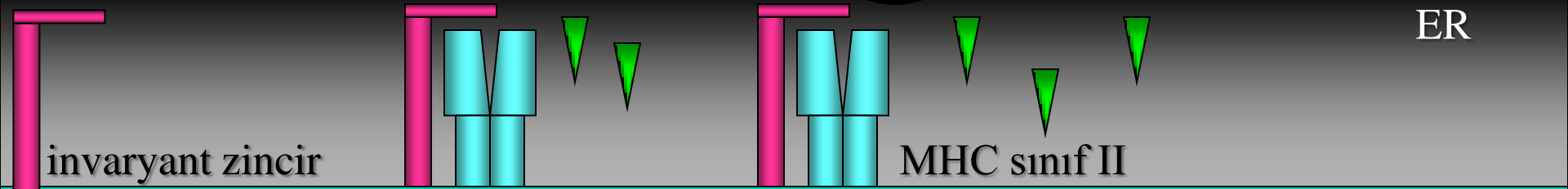
hücre yüzeyi
sitoplazma

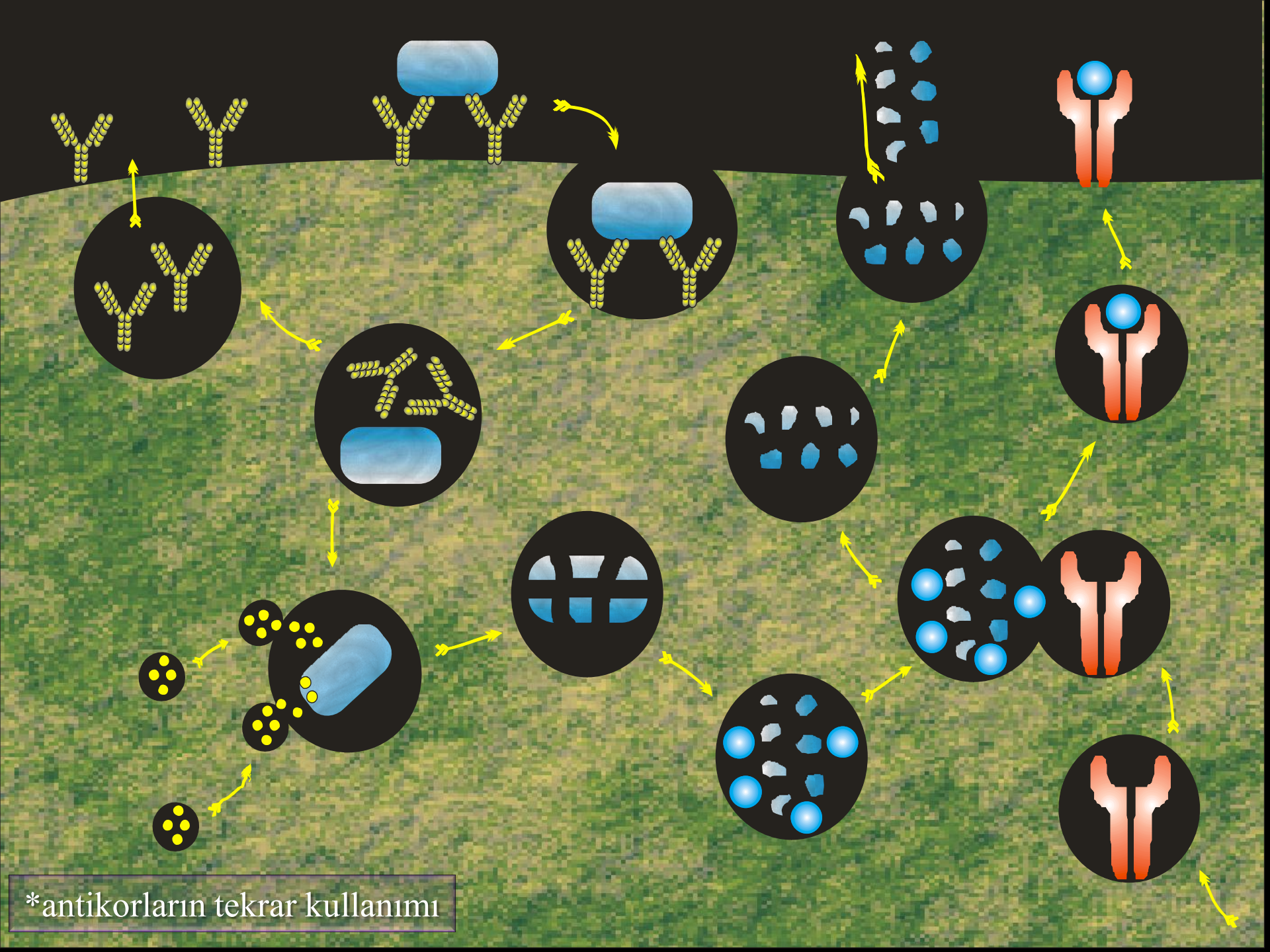


ER

invaryant zincir

MHC sınıf II

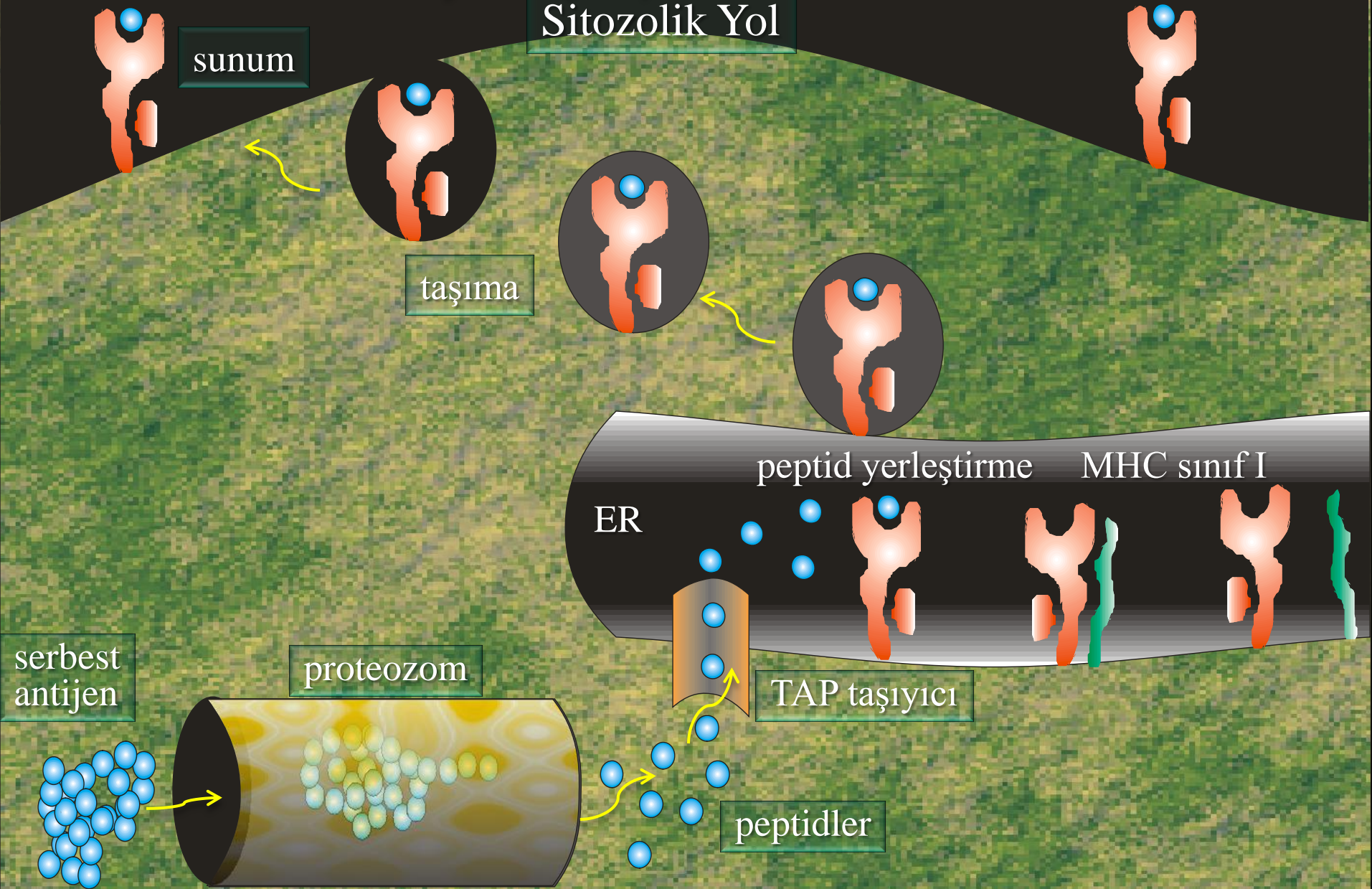




*antikorların tekrar kullanımı

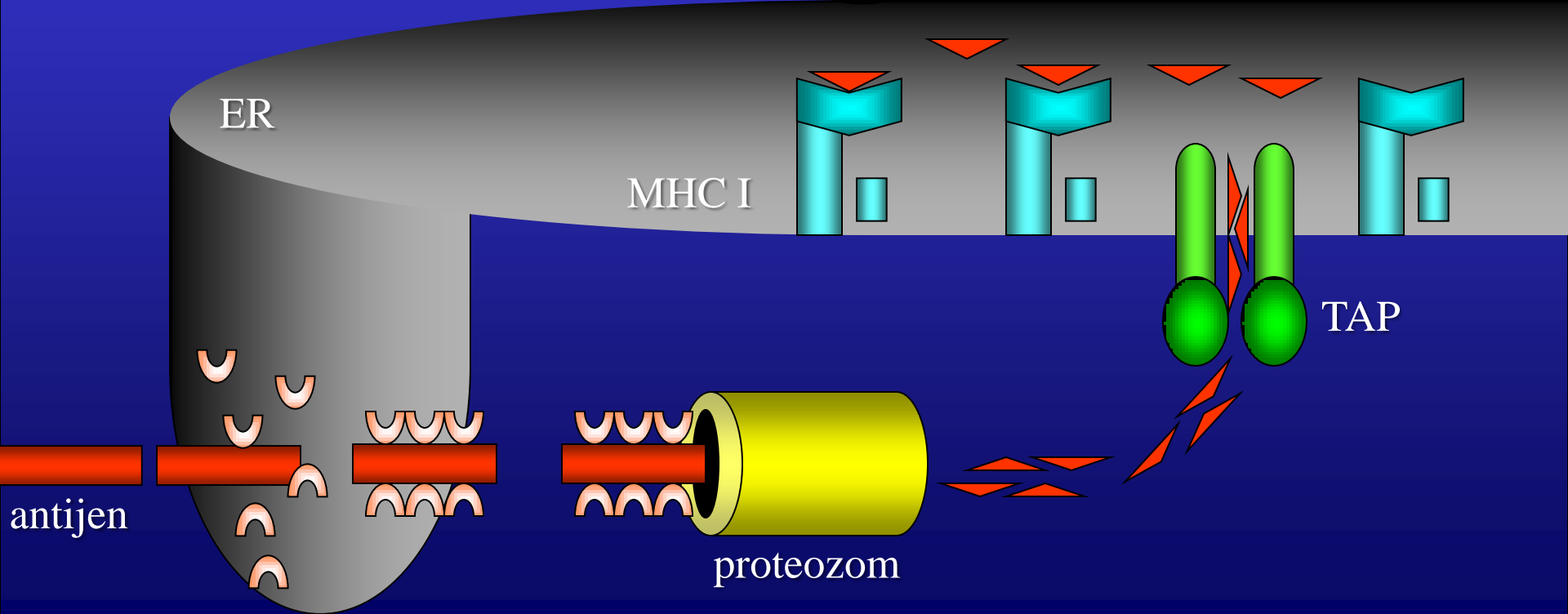
Endojen Antijen İşlenmesi & Sunulması

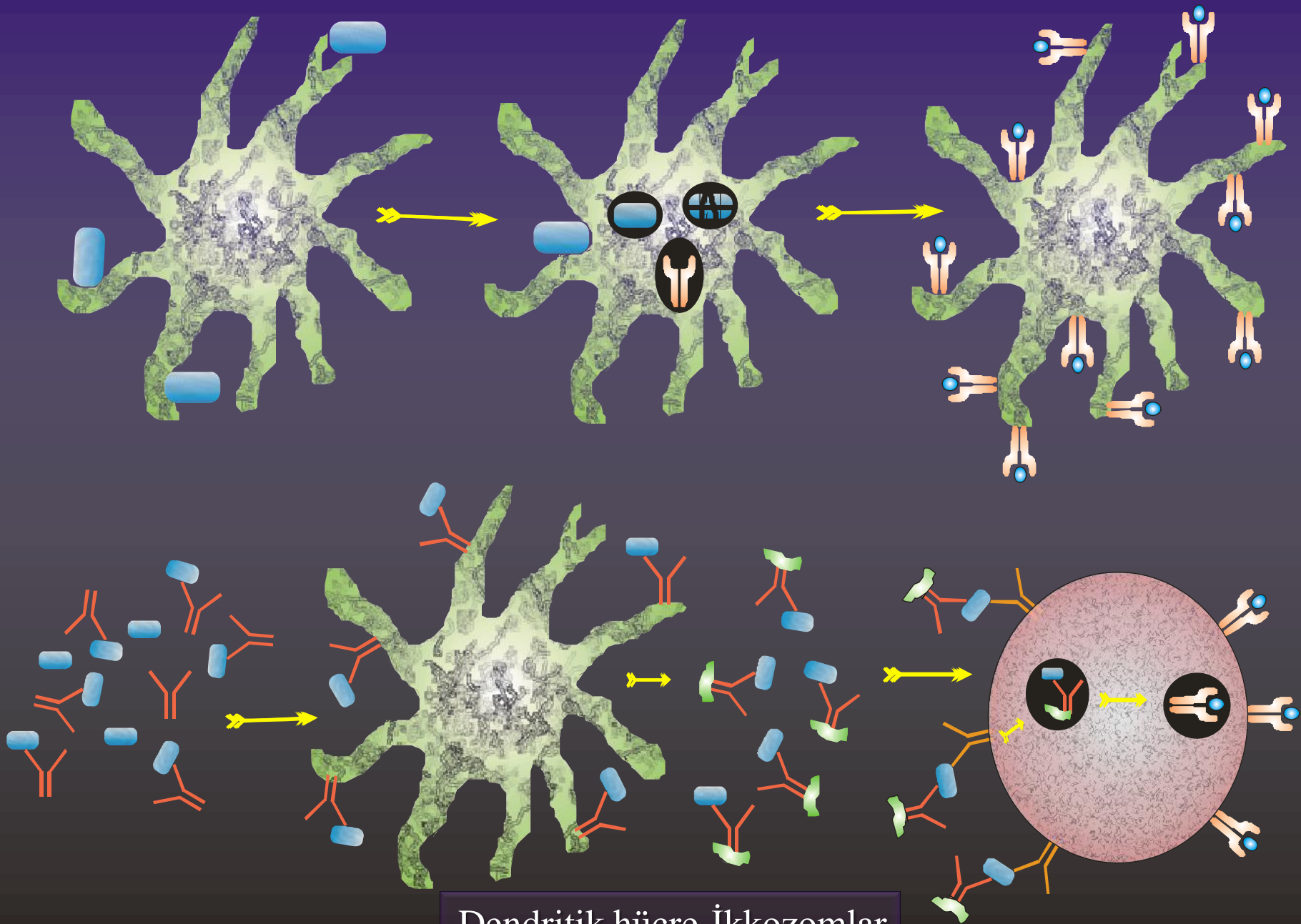
Sitozolik Yol



Endojen Antijen İşlenmesi (sitozolik yol) Sunulması (MHC sınıf I)

hücre yüzeyi
sitoplazma

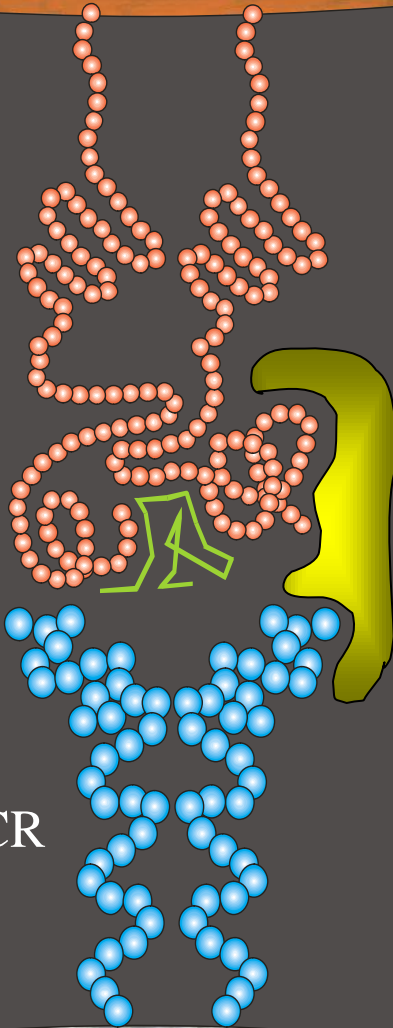




Dendritik hücre-İkkozomlar

Süperantijenler

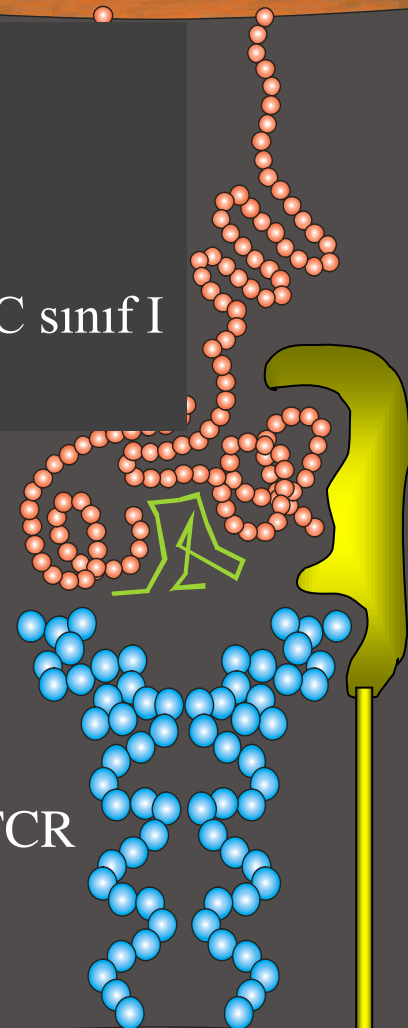
MHC sınıf II



Bakteri
SA

TCR

MHC sınıf I



Virus
SA

TCR