

초 항 원

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이 선 희

Superantigen

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서 론

(superantigen, SAg) 10⁵~10⁶ T (0.1~0.0001%) T 10~30% (pro-inflammatory cytokines) 가

2)

초항원의 작용기전

(antigen presenting cell, APC) (major histo-

compatibility complex) (T cell receptor, TCR) 가 T TCR V V T 가 (Fig. 1).

TCR 가 T T 100 1~100 T 가 TCR V MHC II DR T (Fig. 1).

가 T 10~30%) 3)

TNF, IL-1 IL-2, INFγ T 가 T (anergic) (apoptosis) 4)

초항원 관련 질환

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식중독 1/3

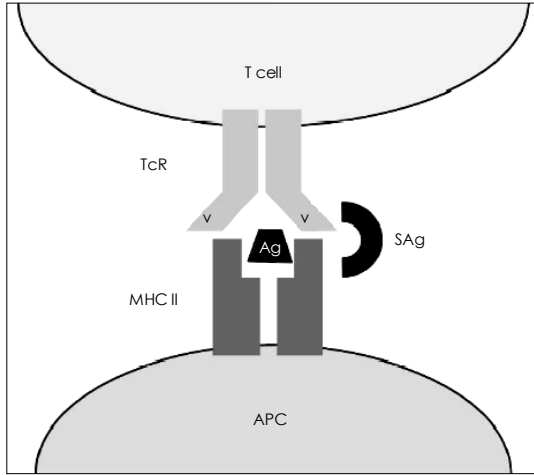


Fig. 1. Representation of T cell activation by a conventional peptide antigen (Ag) or by a superantigen (SAg). TcR : T cell receptor, APC : antigen presenting cell, MHC II : major histocompatibility class II complex molecules (Toxicon 2001; 39).

급성류마티스열(Acute rheumatic fever, ARF)

ARF S. pyogenes

SAg

Kawasaki disease(KD)

KD T , , , KD TSS, STSS,

V 2TCR 가 T 가 가 SAg

자가면역질환

SAg 가 T 가

기 타

조항원과 코폴립증(Nasal Polyposis)

독성 속 증후군(Toxic shock syndrome, TSS)

(diffuse erythroderma),

1980

1,000

가

가 가 toxic shock syndrome toxin(TSST - 1) 가 SE - B가

사슬알균 독성 속 증후군(Streptococcal toxic shock syndrome, STSS)

STSS streptococcal SAg

TSS

30% 가 ET

enterotoxin(ET)

10~20%

20%

30%가

(atopic eczema/dermatitis syndrome, AEDS)

AEDS (80~100%)

65%

ET

70%

가

가

가

가

가

가

가

가

가

가

가

가

가

가

IgE
,
T
6) AEDS
가 7)
6)
가
6)
폐 인
,
가

중심 단어 :

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