Immunology - midterm exam

إعداد :

لجنة الطب والجراحة

Content :

- Introduction to immunology lecture
- Complements lecture
- Lymphocytes Development lecture
- B cell activation lecture
- MHC Antibody structure lecture

Q1) The effect of AB is determined by؟

1. constant region of Heavy chain **xxx**
2. variable region of light chain
3. constant region of light chain
4. variable region of heavy chain

Q2) Somatic hyper mutation is due to:

1. Change in the variable region of heavy chain, constant unchanged **XXX**
2. Constant region of heavy chain changed , variable region is unchanged
3. Variable region of light chain is changed , constant is unchanged
4. Constant of light chain is changed , variable is unchanged
5. Both variable and constant regions are changed

Q3) one of the following Ab plays an inhibitory role on B cells :

1. IGM
2. IGA
3. -IGE
4. –IGG XXXXX
5. IGD

Q4) One of the following Ab is an Anti-CD20 :-

1. IGM
2. IGA
3. IGE
4. IGD
5. IGG XXXXX

Q5) one of the followings binds MHC at the same time with T cell?

1. CD40 XXXXX
2. CD28
3. CTLA-4
4. IG- alpha
5. Cd2

Q6): Complements that act as anaphylatoxins

1. c3a and c5a **XXX**
2. c3b and c4b
3. c3d and c3b
4. c4b and c2b
5. c5-8

Q7): The disease that result from mutation in CD40L gene is

1. Acquired immune deficiency syndrome
2. X-related Hyper-IgM syndrome **XX**
3. Hyper-IgM syndrome
4. paroxysmal nocturnal haemoglobinuria
5. hereditary angioedema

Q 8): B cells in the periphery that haven't exposed to antigens before called:

1. pre-B cells
2. mature
3. immature
4. naïve xx
5. pro-B cells

Q 9) :The MHC II & Li variant chain is synthesized in

1. endoplasmic reticulum **XXXX**
2. cytoplasm
3. Golgi apparatus
4. endosome

Q10) One of these false regarding neutrophils

1.express receptor for IGA
2. play important role in inflammation
3. express receptor for IGM XXXX
4. receptor more than macrophages

Q11) One of the following is not true regarding CD2

1- It's expressed in APC XX
2- It is expressed on mature T cell

Q12)Antibody structure?

- 2 heavy and 2 light chains xxx
- 2 Heavy , one light chain
- one light , one heavy

Q (13): Factor H and decay accelerating factor (DAC) function is:

1. - removes Bb from the alternative pathway C3 convertase**xxx**
2. inhibit association of C9 with C5b-8
3. -inactivesC3b
4. shutting down the ptoteolytic activity of C1s and C1r

Q(14):Common myeloid progenitor is the precursor of all of the following cells EXCEPT:

a) Megakaryocyte
b) Erthrocyte
c) neutrophils
d) natural killer cells
e) monocytes**xxxxx**

Q(15):All of the following statements regarding red pulp of spleen are false EXCEPT :

a) It is the inner pulp of spleen
b) consists of peri-arteriolar lymphoid sheath
c) presence of afferent lymphatic vessels
d) it is the place where aged RBC is destroyed**xxxx**

Q16 : Which of the following sentences best describe humanized antibodies

1. It has the variable part of a mouse and the constant part of human antibody
2. It has the hypervariable part of a mouse and the other parts of human antibody**xxx**
3. It has the constant part of a mouse and the variable part of human antibody
4. It has the variable part of a human and the constant part of human antibody
5. It has all the parts of a mouse and the hypervariable of human antibody

Q3: Papain enzyme digest the antibody prodcucing

a. 2 fab and 1 Fc**XXX**
b. 1 fab and 2 Fc
c. F(ab)2 and smaller Fc
d. F(ab)2 and larger Fc
e. F(ab)2 and 2Fc

Q17 : Q2: The number of antigens that can bind IgM antibody is

1. 2
2. 4
3. 6
4. 8
5. 10 XX

Q18: which of the following receptors is not considered a PRR

1. Scavenger
2. C3b
3. MBL
4. Fc receptor**XXXX**
5. Toll like receptor

Q19: which of the receptors have no role in phagocytosis?

1. CR1
2. CR2
3. CR3
4. CR4
5. Complementary receptor 1

Q20) G-CSF stimulate the differentiation of

-Neutrophils **xxx**
-Monocyte/macrophages
-Basophils
-DC

Q21: The percent of T cells that survive selection process is

1. 60%
2. 75%
3. 30%
4. 5%xxxx
5. 25%

Q22: least abundant immunoglobulin in the adult serum

1) IgM 2) IgG 3) IgA 4) IgD 5) IgE XXX

Q23: The effector activity of antibodies is related to

1. The variable domain of the light chain of the antibody
2. The constant domain of the light chain of the antibody
3. The variable domain of the heavy chain of the antibody
4. The constant domain of the heavy chain of the antibody
5. The variable domain of the J chain of the antibody

Q24: What is the immunoglobulin that act as anti-CD20 antibody kill B cell–derived tumor cells by NK cells by ADCC

1) IgM 2) IgG 3) IgA 4) IgD 5) IgE

Q25: What do we call the B cell when it present Heavy chain

1. Plasma cell
2. Mature B cell
3. Pro B cell
4. Pre B cell
5. Naïve B cell

Q(26):MHC2 in ER can not bind endogenous AG because of the Li variant that - - - - - the binding site, while moving to endosome part this variant will be - -- :

1.activate.... degraded
2.block... activated
3.activate.. block
4.block.... degraded**XXXX**

Q27): MHC2 contain all of the following EXCEPT :

1. Alpha 1
2. .Alpha2
3. Alpha 3 **XXXX**
4. Beta1
5. Beta2

Q28 :MHC1 contain all of the following EXCEPT :

1. Alpha 1
2. .Alpha2
3. Alpha 3
4. Beta1**XXXX**
5. Beta2

Q29) : EQUIVELANT TO hinge region in IgM : - CH2