# Endo - biocem

## Archive

Lecture 1

Done by : Alaa hdayat.



#### metabolism-lecture (#)

1)Which of these response to convert dopa to norepinephrine respectively :

- A- Tyrosine hydroxylase , aromatic amino acid decarboxylase.
- B- Tyrosine hydroxylase , dopamine beta hydroxylase.
- C-Aromatic amino acid decarboxylase , dopamine beta hydroxylase. D-
- Dopamine beta hydroxylase , N-methyltransferase.
- E- Aromatic amino acid decarboxylase , N-methyltransferase.

Answer: C

2)One of the following statement is incorrect regarding steroid hormones :

- A- Play important in carbohydrate regulation
- . B- Fewer different type than peptide hormones.
- C- Enzymes responsible for synthesis of it.
- D-Synthesized in mitochondria and ribosome
- . E- All are lipid soluble and not stored in cells.

3)Steroid is?

- A)sterol nucleus with alkyl group of cholesterol
- B)sterol nucleus without alkyl group
- C)sterol nucleus with methyl group in ring c and d of cholesterol
- D) sterol nucleus with methyl in D ring

Answer: C

Answer: D

4)Peptides and protein hormones? Choose the wrong statement:\*\*

- a. They are made from three to over 200 amino acids
- <mark>b. Are t</mark>he most numerous ho<mark>rmones</mark>
- c. Most peptide hormones are water-soluble
- d. Their synthesis requires gene transcription
- e. Their secretion does not require stimulation



#### metabolism-lecture (#)

1)Steroids are:\*\*

a. They are synthesized from epinephrine and involved in the synthesis and transmission of peptides, proteins and neurotransmitters

b. A type of cell membrane which is impenetrable but movable

c. They are synthesized from cholesterol and play role in sexual development

d. A type of exocrine cell responsible for producing sweat

e. They are short and long chains of amino acids which facilitate physiological, biochemical and growth processes

Answer:c

6)catecholamine hormones synthesis, choose the wrong statement:

a. Tyrosine hydroxylase converts tyrosine to DOPA

b. Phenylethanolamine N-methyltransferase converts norepinephrine to epinephrine

c. Aromatic amino acid decarboxylase converts dopamine to norepinephrine

d. Epinephrine has one extra hydroxyl group and one methyl group than dopamine

e. Conversion of epinephrine to norepinephrine occurs in the storage vesicles

Answer:c



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## Lecture 2

Mechanism Of Hormone Action 1

Done by : فاطمة الزهراء الذنيبات



### biochem-lecture (2)

1.what happens when the binding of hormone to plasma proteins increase?

A. increasing the negative feedback inhibition on releasing hormones

B. increases the action resulted from hormone

- C. reduces half life of hormone
- D. increases renal excretion of hormone
- E. increase store of active form for quick replineshment

Answer:E

2.The wrong about IP3 is:
A. a second messenger
B. contain 3 posphate groups
C. it is inositol 1,4,5 -phosphate
D. bind to IP3 gated channels on cell membrane

Answer:D

3.H2 connect with H3 by? A. C1 B. C2 C. E1 D. E2

E. E3

Answer: C



### biochem-lecture (2)

- 4. All of the following are correct regarding G-protein coupled receptors except :
- A-Most activity comes from alpha subunit.
- B- Alpha and beta subunits are anchored to cell membrane.
- C- Alpha subunit interact with effector protein.
- D-Beta and gamma subunits are tightly associated complex in active form.
- E-G-alpha divided into four families.

Answer: B

اللهم صلّ على مُحمّدٍ عدد ما ذكره الذّاكرون وغفل عن ذك<mark>ره الغا</mark>فلو<mark>ن</mark>



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## Lecture 3

Mechanism of Hormone Action Part 2

#### Done by :

Bashar Ayasrah



### biochemistry -lecture (3)

:The wrong about IP3 is. .A. a second messenger B contain 3 posphate groups C. it is inositol 1,4,5 -phosphate D) bind to IP3 gated channels on cell membrane

#### .answer: D

#### 2The effector protein of diacylglycerol is

- .A- Phospholipase C :
- .B- Guanyly cyclase
- .C-Phosphatidylinositol
- .D- Protein kinase C

#### Answer: A

: Which of the following statement is correct about tyrosine kinase receptors (3

- GRB2 binds to SOS with in turn interacts with the active ras
- The first level of termination signals is degradation of the 2nd messenger
- .<mark>C- Ras is</mark> connected to the membrane by lipid anchor
- .ID-SOS dissociation of GDP from adapter protein
- .I- Dimerization is not necessary to activate the receptor

Answer:C



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## Lecture 3

Mechanism of Hormone Action Part 2

#### Done by :

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### biochemistry -lecture (3)

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Answer:C





### Lecture:4

Nuclear Receptors

#### Done by :



### Biochemistry -lecture (4)

1)Nuclear localization signal domain important for :

- A- Recognition of HRE.
- B- Link between LBD and DBD.
- C- Coactivators to E domain.
- D- Directing the hormone/receptor complex to HRE.

Answer:D

?All of the following is related to the DNA binding domains except(2 A. mediates dimerization

- B. Contain zink finger motifs if 10-20 a.a
- C) have the nuclear localization signal which recruits coactivator
- D. stabilize binding HRE to the receptor

Answer:C



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## Lecture 5

Thyroid metabolism



#### Biochemistry -lecture (5)

1) D2 ( a varient of iodothyronine deiodinase) can found mostly in:
A)Liver
B)kidney & Thyroid
C)Brain
D)Central nervous system

#### 2)The site for iodination of thyroglobulin is:

- A) parafollicular cells
- B) cortex
- C) follicular cells
- D) thyroid lumen
- E) blood

#### 3)All true except related to colloid?

A. Iodination occur inside lumen B) In parathyroid cell

#### Answer:D

Answer:A



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Lecture 6



biochemistry-lecture (6)	
1)Which of the following contain 19 carbon atoms :	
.A- Testosterone	
.B- Estrogen	
.C-Progesterone	
.D-Mineralocorticoid	
.E- Cortisol	
	Answer: A
2)One of the following statement is incorrect regarding steroid horm	ones:
.A- Play important in carbohydrate regulation	
.B- Fewer different type than peptide hormones	
.C- Enzymes responsible for synthesis of it	
.D-Synthesized in mitochondria and ribosome	
.E- All are lipid soluble and not stored in cells	
	Answer: D
3)According to the steroid nucleus all are true except?	
A)4 rings(A B C D)	
B) composed of 17 carbon atoms beside 2 methyl groups	
C) there is a methyl group at C17	
D)there is methyl group at C13	
b)mere is meanyr group ar Or	Answer · C
4) Deficiency in 21-bydroxylase can lead to all of the following except?	
A)Excess adrenal androgens	
B)Deficiency in cortisol and aldosterone	
C)Ambiguous genitals	
D)adrenogenital syndrome	
	Answer

