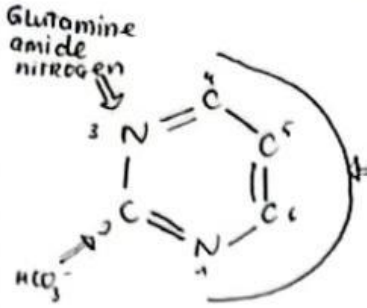
TỔNG HỢP BASE PYRIMIDINE



NGUỒN GỐC

GA
- 1+9 → OROTAT
- 2+8 → PYRIMIDINE NUCLEOTIDE

C.P SYNTHETASE I
GLUTAMINE URE (BTG, TYTHỂ)

C.P SYNTHETASE II
THEO PYRIMIDINE (BTG)

→ CARBAMOYL PHOSPHAT

Điều hoà

Đ.H NỒNG ĐỘ CARBAMOYL PHOSPHATE

THÔNG QUA C.P SYNTETASE II

GĐ1

HCO_3^- + 2 ATP + H_2O + GLN → (CARBAMOYL PHOSPHATE SYNTHETASE II) → 2ADP + P_i + GLU

gắn CO_2 vào GLN

↓

CARBAMOYL PHOSPHATE

ASP + P_i → (ASPARTATE TRANSCARBAMOYLASE) (ATCase)

gắn ASP vào

↓

CARBAMOYL ASPARTATE

H_2O → (DIHYDROOROTASE)

Tách H_2O đóng vòng

↓

DIHYDRO OROTATE

Quinone (OXH) → (DIHYDROOROTATE DEHYDROGENASE) → Quinone (KHỬ)

↓

OROTATE

GĐ2

PRPP → (OROTATE PHOSPHORIBOSYL TRANSFERASE) → PP_i

gắn phần PRP vào

↓

OMP (OROTIDINE 5-MONOPHOSPHAT)

CO_2 ← (OMP DECARBOXYLASE)

Tách CO_2

↓

UMP (URIDIN MONOPHOSPHAT)

(kinase) 2 lần phosphat

gắn P 2 lần vào

↓

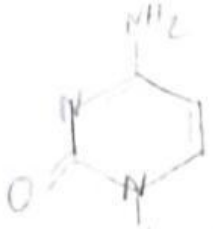
UTP (URIDYLAT 5-TRIPHOSPHAT)

ATP + H_2O + GLN → (CTP SYNTHETASE) → ADP + P_i + GLU

gắn NH_2 (từ GLN) vào

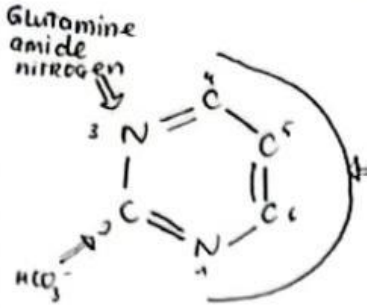
↓

CTP (CYTIDYLAT 5-TRIPHOSPHAT)



LIVEWORKSHEETS

TỔNG HỢP BASE PYRIMIDINE



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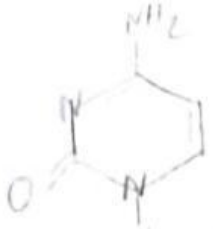

LIVEWORKSHEETS