

극성 R

-OH: Ser, Thr, Tyr

1)
2)

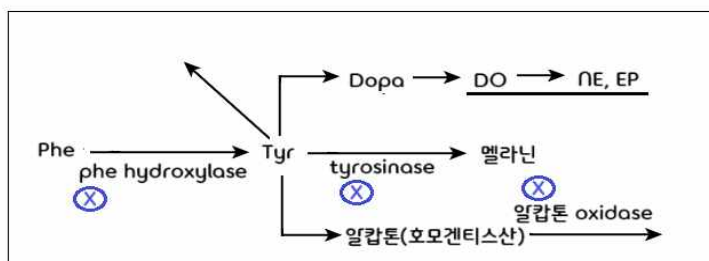
-SH: Cys

-산성 아미노산: Asp, Glu

\updownarrow
Asn
 \updownarrow
Gln

1)
2) 시각세포
3) LTP
4)

-염기성 아미노산: Arg, Lys, His

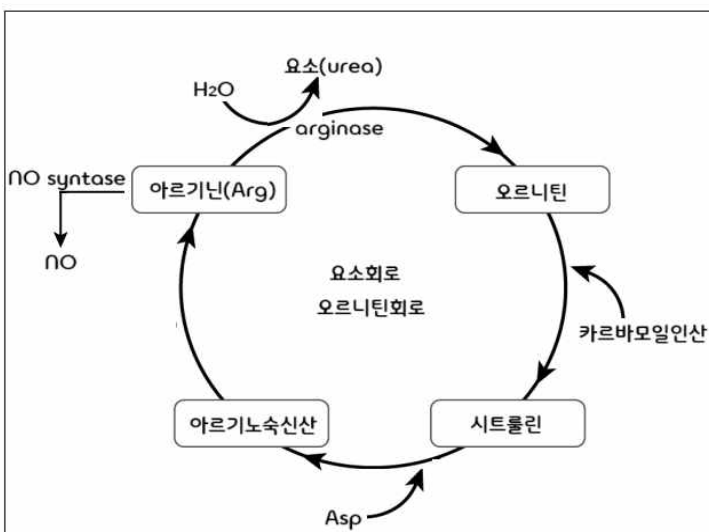


ptn 당화

- O 당화
- N 당화

ptn 인산화

- by ser/thr kinase
- by tyr kinase



Gly { 입체이성질체 X
억제성 NTM

Met { 대용코돈(AUG)
식물H

세균	고세균	진핵
N-formyl Met		

Pro { ptn 2차 구조 방해
닌히드린 반응(노란색)

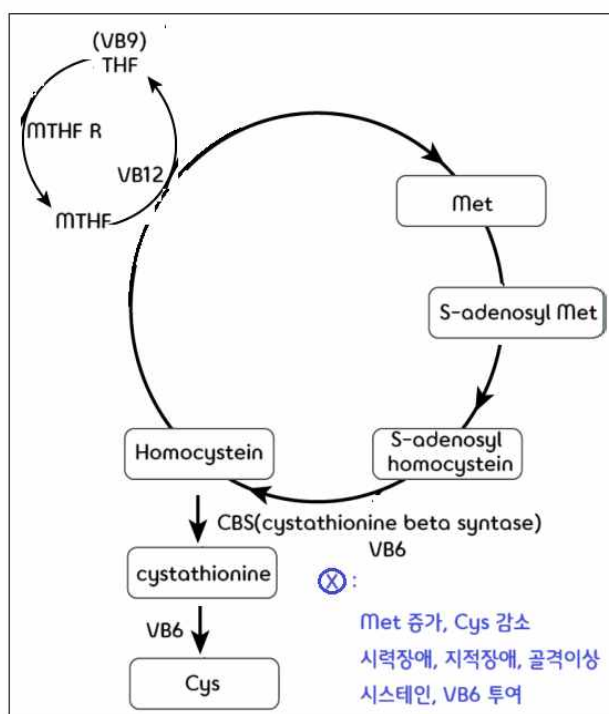
: Phe, Tyr, Trp

1) NTM:
2) H:
3) 식물 H:

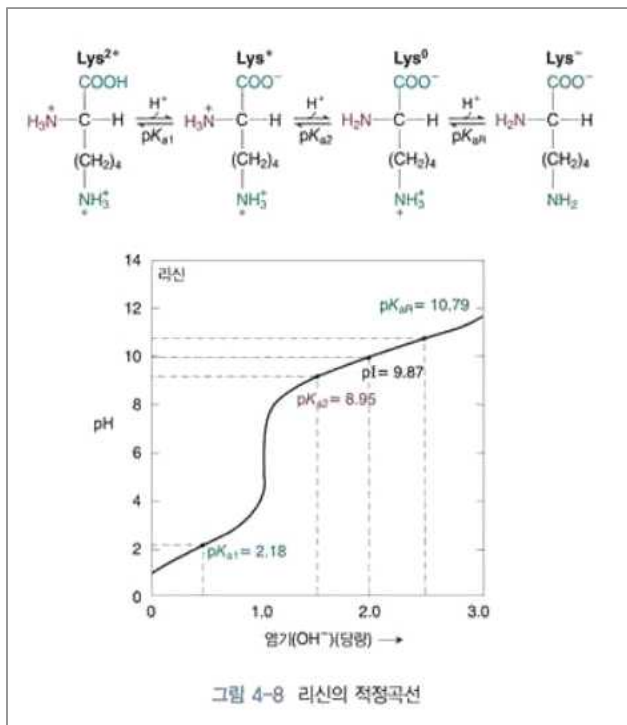
-S: Cys, Met

-BCAA: Val, Leu, Ile

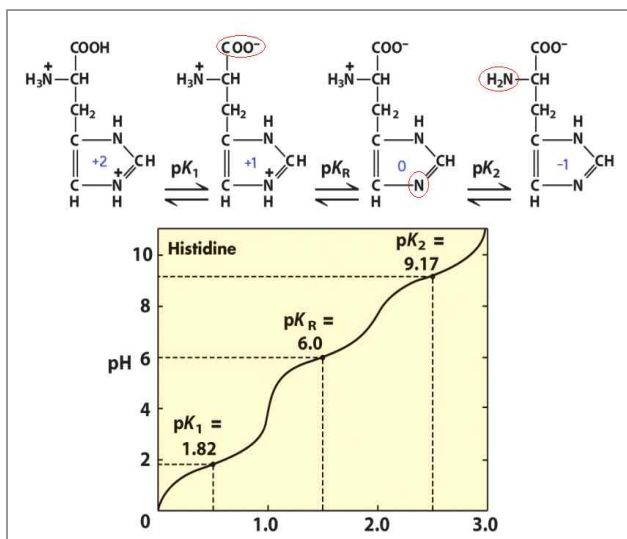
⊗ branched chain alpha-keto acid dehydrogenase
→ 단풍시럽노증(maple syrup surine disease(MSUD))
뇌기능억제(발작, 기면, 정신지체), 신체발달지체
BACC 섭취제한



Lysine 적정곡선



Histidine 적정곡선

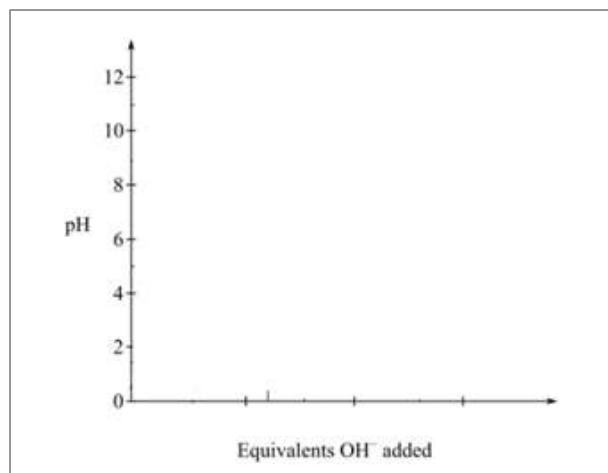


Q1. 다음은 Cystein의 각 기능기에 대한 pKa값을 나타낸다.

pK1	pK _R	pK2
1.96	8.0	10.28

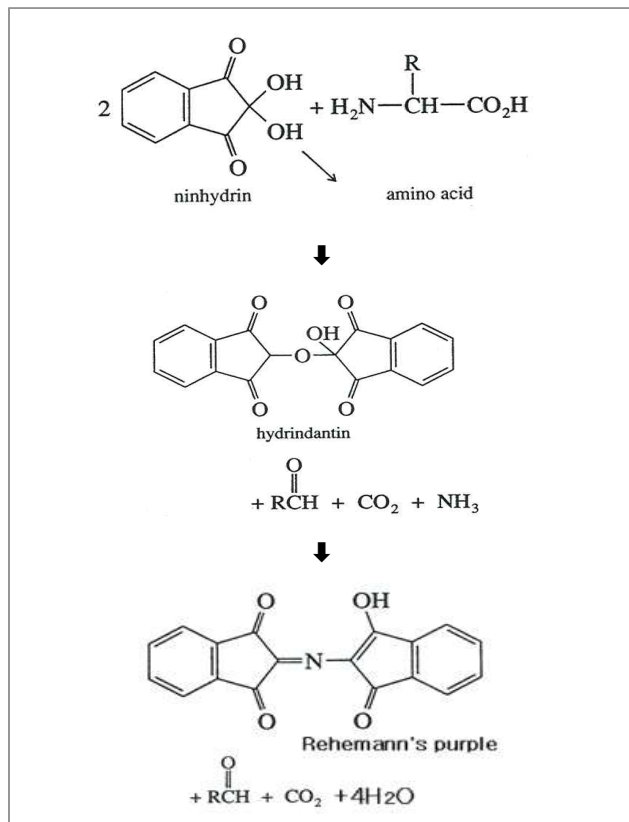
1) Cystein의 기능기 해리 양상에 따른 4가지 형태를 그리시오

2) Cystein의 적정곡선을 그리고 완충구간과 pI를 표기하시오.



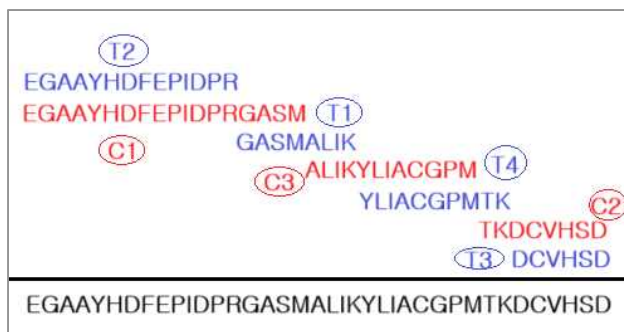
3) Cystein의 pI값을 쓰시오.

닌히드린 반응



Q2. Ninhydrin과 아미노산의 반응은?

- ① 탈수소반응
- ② 아미노기의 환원
- ③ 펩타이드 결합의 분해
- ④ 측쇄의 분해
- ⑤ 산화적 탈카르복시화



Q3. Angiotensin II has the octapeptide sequence below.
What fragments would result if angiotensin II were cleaved with trypsin? With chymotrypsin?

Asp-Arg-Val-Tyr-Ile-His-Pro-Phe.