



カベルネからの阻害剤の単離

Red Wine (2 L)

(Johnohira Cabernet Sauvignon 1998)

| 5-fold dilution

Cosmosil 140 C18-OPN column (1st)

| eluted with 30% EtOH

Cosmosil 140 C18-OPN column (2nd)

| stepwise elution with 10-30% EtOH

| active fractions was 10% EtOH eluate

Toyopearl HW-40S column

| eluted with 0.1 M Acetic acid (pH 2.9)

Superdex Peptide HR 10/30 column

| eluted with 0.1% TFA solution

SOURCE 5RPC ST column

A: AcCN 2% in 10 mM Ammonium acetate

B: AcCN 70% in 10 mM Ammonium acetate

A→B gradient /80 min

Puified Active Peptides (A, 58  $\mu$ g; B, 96  $\mu$ g)

Isolation Procedures of PEP Inhibitors from  
Cabernet Sauvignon Wine

# 単離PEP阻害剤のアミノ酸配列 とPEP50%活性阻害濃度

Amino Acid Sequences of the PEP Inhibitors Isolated  
and the  $IC_{50}$  values against PEP from Flavobacterium

Fraction	Amino acid sequence	$IC_{50}$ ( $\mu$ M)
A	Val-Glu-Ile-Pro-Glu	17.0
B	Tyr-Pro-Ile-Pro-Phe	87.8

The synthetic peptide, Z-Gly-Pro-pNA was used as the substrate.

# PEPによるバソプレッシンの分解とVEIPEによる阻害

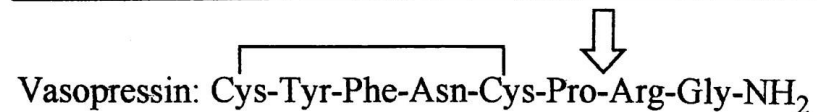
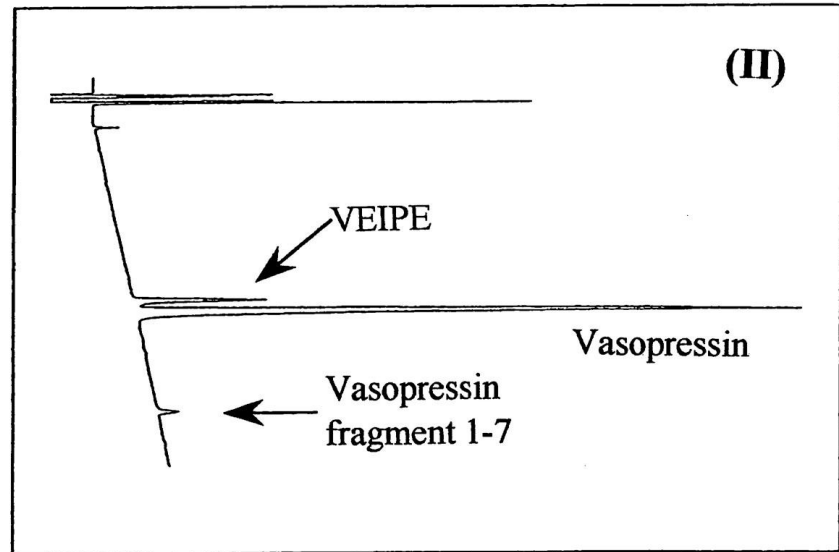
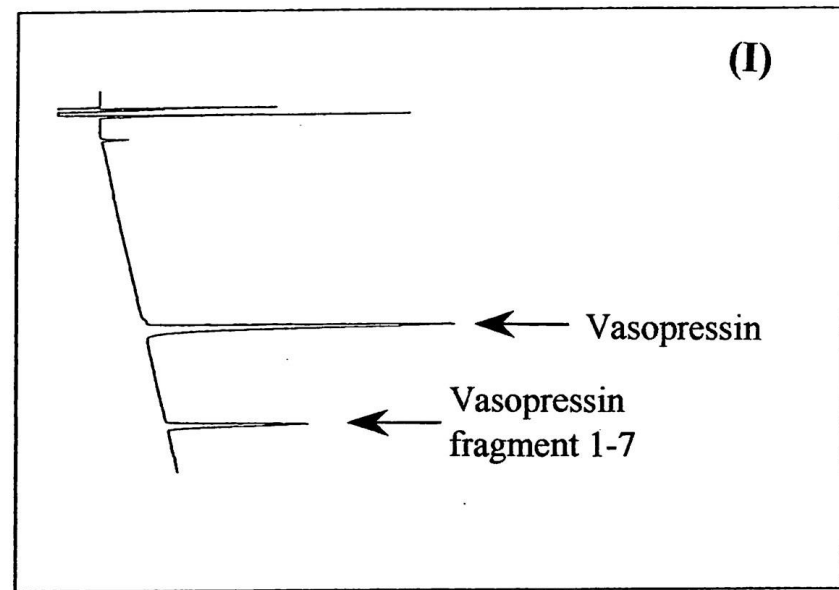
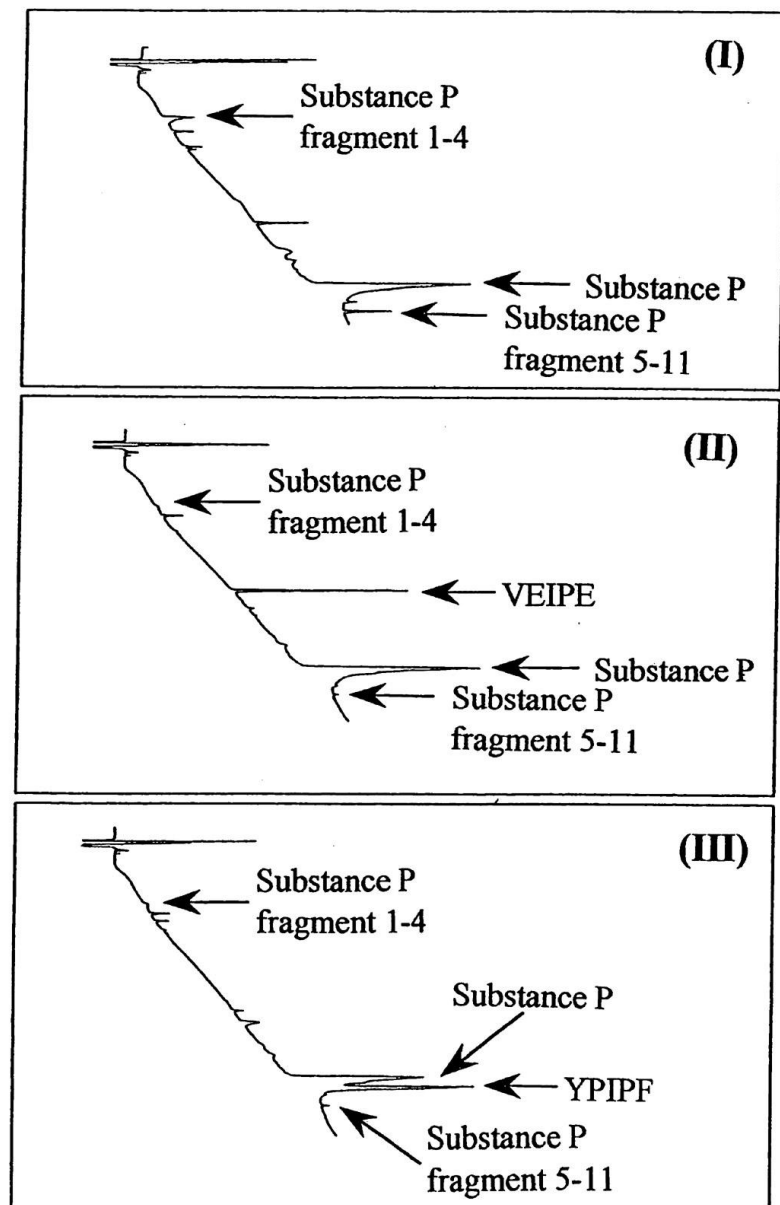


Fig. HPLC profiles of the degradation of Vasopressin by PEP from *Flavobacterium* with (II) and without (I) VEIPE.

# PEPによるサブ スタンスPの分 解とVEIPEおよ びYPIPFによる 阻害



Substance P: Arg-Pro-Lys-Pro-Gln-Phe-Phe-Gly-Leu-Met-NH<sub>2</sub>

Fig. HPLC profiles of the degradation of Substance P by PEP from *Flavobacterium* with VEIPE (II), YPIPF (III) and without inhibitors (I).



# 阻害剤によるPEPのペプチド・ 神経ホルモン分解阻害効果

Neuropeptide	Inhibition rate (%)	
	VEIPE (200 $\mu$ M)	YPIPF (200 $\mu$ M)
Substance P	87	81
Vasopressin	86	90
Neurotensin (F8-13)	87	91