



>>Entry Name: α -Substance I_B

Synonym(s): Sexual agglutination peptide

CAS Registry Number: 60407-48-9

H-Arg-Gly-Pro-Phe-Pro-Ile-OH

Molecular Formula: C₃₃H₅₁N₉O₇

Molecular Weight: 685.822

Accurate Mass: 685.391146

Percentage Composition: C 57.79%; H 7.50%; N 18.38%; O 16.33%

Biological Source: Isol. from α -type cells of heterothallic yeast (*Saccharomyces cerevisiae*)

Use/Importance: Induces sexual agglutination in *S. cerevisiae*

>>Derivative: Diacetate salt

CAS Registry Number: 64566-61-6

Physical Description: Solid

Melting Point: Mp 107-112°

Optical Rotation: $[\alpha]_D^{21} -56.2$ (c, 1 in H₂O)

Sigma: A2152

>>Derivative: Z-Arg(NO₂)-Pro-Gly-Phe-Pro-Ile-O-Benzyl

Physical Description: Cryst. (EtOAc/Et₂O)

Melting Point: Mp 98-105°

Optical Rotation: $[\alpha]_D^{20} -33.8$ (c, 1 in DMF)

References:

Sakurai, A. *et al.*, *Agric. Biol. Chem.*, 1976, **40**, 1451, (*isol*)

Aoyagi, H. *et al.*, *Bull. Chem. Soc. Jpn.*, 1977, **50**, 2387, (*synth*)

Aoyagi, H. *et al.*, *Experientia*, 1977, **33**, 870, (*ms, struct, synth*)