

RINGKASAN

Pemblokiran gugus amino pada valin menggunakan asam format berdasarkan metode Sheehan-Yang telah dilakukan. Reaksi dilakukan dengan cara mereaksikan valin dan asam format dilanjutkan dengan penambahan anhidrida asetat. Pemurnian produk dilakukan dengan metode rekristalisasi menggunakan etanol. Produk yang diperoleh berupa kristal putih yang berbentuk jarum dengan titik leleh 153 - 154 °C dan memberikan noda tunggal pada plat KLT. Analisis pemblokiran dilakukan dengan spektrofotometer IR menggunakan plat KBr dan teramati terjadinya perubahan pola spektra pada daerah ikatan hidrogen (2800 - 3800 cm⁻¹) dan karbonil (1600 - 1700 cm⁻¹). Disimpulkan bahwa pemblokiran gugus amino pada valin menggunakan asam format berhasil dilakukan.



SUMMARY

The protection of amino group of valine using formic acid based on Sheehan-Yang's procedure had been done in this research. This reaction was carried out by reacting valine and formic acid with addition of acetic anhydride. The product yielded was then purified by recrystallization method employing ethanol as a solvent. This reaction produced needles-like white crystal with melting point of 153 - 154 °C and the crystal provided one mark on TLC plate. The successfulness protection had been analyzed by comparing the IR spectrum pattern of both hydrogen and carbonyl bonds between valine and the purified product. Actually it has been significantly observed that was indeed to be change of the IR spectrum pattern on wave number of 2800 - 3800 cm⁻¹ (hydrogen bond band) and 1600 - 1700 cm⁻¹ (carbonyl bond band). It was concluded that the protection of amino group of valine has been successful conducted.

