ISOLATION AND PURIFICATION OF THE enilodocida CHOLINESTERASES OF CHICKEN'S EGG. Hodo

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Department of Chemistry. Gomal University, Dera Ismail Khan The activity was measured after 30 minubes pectrophotometrically at 405 nm

S. De Boeck and J. Stockx State University of Ghent, Belgium e milliunit of enzyme is defined as the amount of enzyme which hydrolyses

one nano-mole of acetylthiecholinYRAMMUZ r minute under conditions specified

Cholinesterase of yolk was purified by conventional biochemical method including c ntrifugation techniques, precipitation with (NH4)2SO4 and gel filtration. Chromatography of the preparation on sephadex G-200 revealed two quite distinct activity peaks. The peak I was almost completely separated from the proteins in sample with purification factor upto 350 with overall recovery of 14%. While peak II was purified 21 fold with recovery of 10% representing low molecular weight.

INTRODUCTION International section of white

Acetylcholinesterase (EC 3.1.1.7) and cholinesterase Many studies (EC 3.1.1.8) from different sources have been carried out. But much is left to be studied on yolk of the chicken eggs. yolk was supported by the paper, its content was drained by incision of the membrane

Cholinesterase is one of the most active enzyme found in the yolk of the chicken's eggs. WILLEMS and STOCKX1 were able to localize this enzyme in the water solube fraction of the yolk, SAITO et al.2 Starting from this fraction BOECK et al3 were able to purify the enzyme by conventional method but the recoveries were too low. 2. Centrifugation of diluted yolking Yolk was diluted with water in ratio of

a 000 8 In this paper we do report the partial purification of cholinesterase from the in a SORVALL-RC2-B centrifuge to get a clear supernatant anship aloy ggs. EXPERIMENTAL was innianteque edT ... tiaoget

3. Ultra-contribugation of yolk supernatant :- The crude yolk supei lairateM. Acetylthiocholine iodide was purchased from sigma (London) Chemical Co., Sephadex G-200 was supplied by pharmacia. All other reagents were commercial products of analytical grade purity. All bas (All) anothers with work bas Taw

Abbreviations: -Act: -Activity; Sp. Act-specific activity;

P.F :- Purification factor : Rec. - Recovery ;

leghorns and were used at