

**Archachatina (Calachatina) Marginata
Haemolymph Proteins, Physicochemical
Characterization of Protein B.**

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Abstract:

The haemolymph of Archachatina (Calachatina) marginata has been found to contain other proteins apart from the predominant protein, haemocyanin. One of the other protein components, Protein B, was isolated and purified using preparatory ultracentrifugation and gel filtration techniques. Physicochemical characterization, employing different techniques has showed that Protein B is different from the haemocyanin (and/or its subunit(s)) from this mollusc. Protein B has a molecular weight of 360KD consisting of two chains which are of identical molecular size.

Amino acid composition for Protein B shows that: (i) there exist more acidic residues combined than those of the basic residues combined. (ii) there is a very large occurrence of Proline residues (iii) there is also a large amount of cysteine residues.

There is one gram atom of copper per dimer. Protein B is a glycoprotein. The carbohydrate portion is made up of units of acetylglucosamine and galactosamine. Peptic peptide fractionation of reduced carboxymethylated Protein B has shown that most of the carbohydrate can be found on a peptide having a mass of 15KD.

Keywords: Archachatina (Calachatina) marginata/ haemolymph protein/ haemocyanin protein/ mollusc/ Protein B

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