

Purification and Characterization of a Lectin from Locular Fluid of Tomato

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Abstract

Lectin was purified through NaCl extraction, ammonium sulfate precipitation, and affinity chromatography using Sephadex G-200 from locular fluid of tomato, and studied its some biochemical characterizations. SDS-PAGE of the purified lectin revealed it was a tetramer composed of two identical subunits with molecular weights of 39 and 23 kDa. The purified lectin was agglutinated trypsin-treated human ABO erythrocytes in potency, and the most pronounced activity of agglutination was found at B type erythrocyte. This lectin showed maximum thermal stability at 70 °C, and was relatively stable to heat with the higher activity at 40-80 °C. The optimal temperature and pH of this lectin were 50 °C and pH 7.2, respectively.

References

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