

## **A crab lectin from the hemolymph of *Macrophthalmus japonicus***

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Lectins are carbohydrate-binding proteins that are able to induce cell agglutination or the precipitation of glycoconjugates. In this study, a calcium-dependent sialic acid-binding lectin has been isolated by thyroglobulin-affinity chromatography from the coastal crab *Macrophthalmus japonicus*. This lectin, *M. japonicus* lectin (MJL), was eluted with 50mM Tris-HCl, 0.3M NaCl, 10mM EDTA, and the recovery yield from the crude protein extract was about 5.6%. The molecular weight of MJL was estimated as 65 kDa in SDS-PAGE both under reducing and non-reducing conditions. MJL induced an agglutination reaction in rabbit, rat, and mouse erythrocytes, but not in human ABO types. This activity was effectively inhibited by sialoglycoproteins such as fetuin, bovine submaxillary mucin, and thyroglobulin.