

## Datasheet for LCA – Lens culinaris Agglutinin

| LCA – Lens culinaris Agglutinin |                                                                                                                                                                                                                                                                                                                                          |
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| LCA                             | <b>Catalog Number:</b> MGC-J107<br><b>Pkg:</b> 5mg<br><b>Product Form:</b> Lyophilized powder (salt-free)<br><b>Storage:</b> Stable for 1 year at 4°C                                                                                                                                                                                    |
| <b>Origin</b>                   | lentil (Lens culinaris)                                                                                                                                                                                                                                                                                                                  |
| <b>Sugar Specificity</b>        | Binds to D-Mannose (D-Man) and D-Glucose (D-Glc)                                                                                                                                                                                                                                                                                         |
| <b>Mitogenic Activity</b>       | Present                                                                                                                                                                                                                                                                                                                                  |
| <b>Blood Type Specificity</b>   | Non-specific                                                                                                                                                                                                                                                                                                                             |
| <b>Structure</b>                | Glycoprotein with molecular weight 46,000<br>Tetramer ( $\alpha_2\beta_2$ ) composed of subunits of MW 5,710 and 17,572 [Refs: 2), 3)]<br>Exists as a dimer in aqueous solution [Ref: 4)]<br>Recent analysis shows one $\text{Ca}^{2+}$ per monomeric unit<br>Isolectins A (pI = 8.15) and B (pI = 8.65) exist; LCA is a mixture of both |
| <b>Features</b>                 | Strong binding to structures where L-Fucose (L-Fuc) is $\alpha$ 1-6 linked to GlcNAc near asparagine<br>Sugar specificity is the same for both LCA-A and LCA-B                                                                                                                                                                           |

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### References

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