

**International Blood Group
Reference Laboratory**500 North Bristol Park
Northway
Filton
Bristol
BS34 7QH**Antigen** Le^a (ISBT No. 7001) / CD 174**Clone** BRIC 87**Product Code** 9422**Immunoglobulin Class** Mouse IgM, kappa light chain**Protein Development
and Production Unit****Tel:** +44 (0)117 921 7500**Fax:** +44 (0)117 912 5796**Website:** <http://ibgri.blood.co.uk>**Email:** enquiries.IBGRL@nhsbt.nhs.uk**Antigen Description and Distribution**

The Le^a antigen is the carbohydrate structure:- Gal(β1-3) Fuc(α1-4) GlcNAc(β1-R) or monofucosylated Type I chain. Depending on the tissue of origin, the antigen is found on cell surfaces and on glycoproteins in exocrine secretions of individuals of genotype se/se, Le/-. Also found in circulating glycosphingolipids which are passively adsorbed to the surface of circulating cells¹.

Clone

BRIC 87 was made in response to human erythrocytes. The antibody reacts in haemagglutination tests preferentially by enzyme methods. BRIC 87 was submitted to the second international workshop on monoclonal antibodies against human red cells². When diluted appropriately, BRIC 87 has the specificity anti-Le^a. The antibody is specifically inactivated by incubation with Synsorb Lea (Chembiomed)². BRIC 87 can be used by TLC immunostaining³. BRIC 87 (MA5) was submitted to the workshop on glycomapping of monoclonal and polyclonal Lewis antibodies⁴ where its specificity was confirmed as anti-Le^a.

References

1. Oriel R *et al* (1986) *Vox Sang.* **51** 161-171 (review).
2. Chester MA *et al* (Eds.) (1990) *Proceedings of the Second International Workshop and Symposium on Monoclonal Antibodies against Human Red Blood Cells and Related Antigens*, Lund, 1990.
3. Henry SM *et al.* (1994) *Glycoconjugate J.* 11: 600-607.
4. Williams E *et al.* (2016) *Transfusion* 56 (2):325-33. Glycomapping the fine specificity of monoclonal and polyclonal Lewis antibodies with type-specific Lewis kodocytes and function-spacer-lipid constructs printed on paper.