

REVIEWER'S REPORT

Manuscript No.: IJAR-59322

Title: Study of agglutination reaction of Ag-Ab coated with Sodium alginate beads.

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision ...

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality			Fair	
Techn. Quality			Fair	
Clarity			Fair	
Significance			Fair	

Reviewer's ID: Dr. Sumathi

Detailed Reviewer's Report

1. An agglutination reaction is the visible clumping of particles—such as red blood cells, bacteria, or latex beads—when specific antibodies bind to matching surface antigens.
2. An agglutination reaction is a biological test where microscopic particles—like bacteria or red blood cells—clump together when they mix with specific antibodies. In science and medicine, this clumping acts like a physical "signal" that tells doctors and researchers exactly what types of germs or proteins are hiding inside a biological sample.
3. An Ag-Ab (antigen-antibody) test is a fourth-generation screening tool that looks for both the HIV virus and your body's immune response at the same time to catch infections earlier.
4. In medical diagnostics, Ag-Ab stands for Antigen-Antibody. It most commonly refers to a 4th-generation HIV combination test that simultaneously detects the HIV-1 p24 antigen alongside antibodies to both HIV-1 and HIV-2

REVIEWER'S REPORT

- 5. Sodium alginate beads are small gel spheres formed when a sodium alginate solution reacts with calcium ions, causing the polymers to cross-link into a solid hydrogel.**
- 6. Antigen-Antibody (Ag-Ab) complexes and individual proteins are frequently immobilized using sodium alginate beads in biomedical applications, such as immunoassays, affinity purification, and targeted drug delivery.**
- 7. Antigen-antibody (Ag-Ab) immobilization on sodium alginate beads is a technique used in biotechnology to trap or attach proteins onto a stable, biodegradable hydrogel support. By embedding or coating these active immune proteins onto sodium alginate, scientists can create reusable biosensors, purify specific molecules from blood, or design advanced diagnostic tests.**
- 8. Key words must be given.**
- 9. Abstract , methodology and observation only given. With this how possible to publish in your journal.**
- 10. Must be included result with tables and graphs, Review of literature, Discussion points with references, conclusion, Summary and more references in alphabetical order.**
- 11. After those changes only can be published in your journal.**