

# Technical Brief

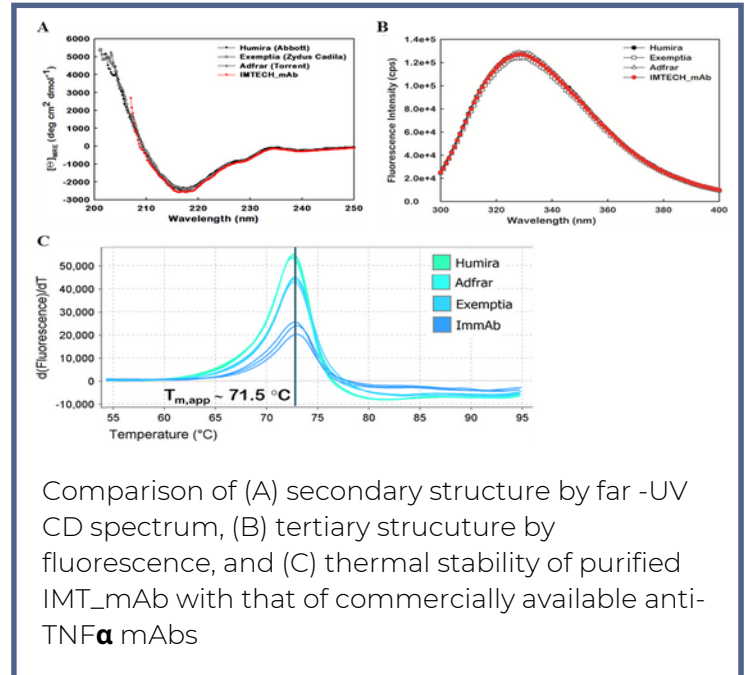
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## Adalimumab Biosimilar

### About Adalimumab

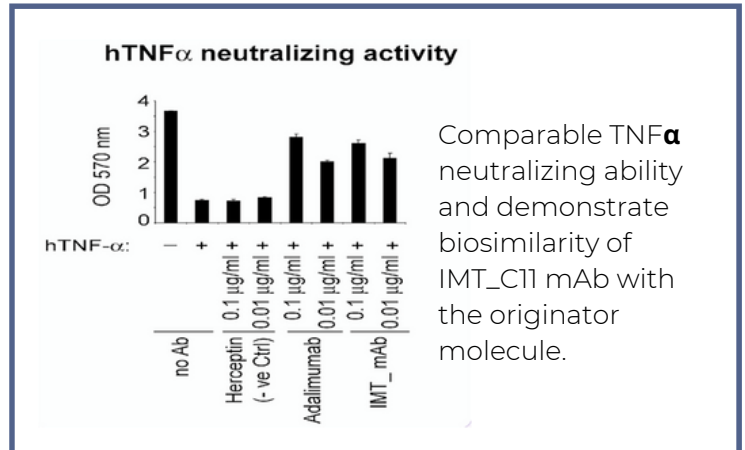
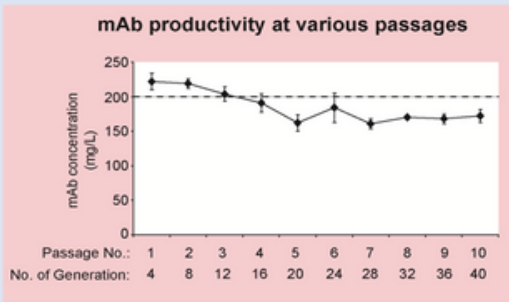
Adalimumab, sold by AbbVie under the brand name Humira, is a human monoclonal antibody that treats autoimmune diseases by inhibiting tumour necrosis factor (TNF). It is used in the treatment of rheumatoid arthritis, juvenile idiopathic and psoriatic arthritis, Crohn's disease, and more. However, treatment costs are prohibitively high, with annual cost of treatment with the biosimilar at Rs 1,44,000 - 3,60,000. Thus, there is an urgent need for process innovation to reduce costs.

### Selected Biosimilarity Data



### Technology Offering

- Inhouse developed, stable, unencumbered CHO cell clone (IMT\_C11) (mycoplasma free and functional)
- Produces Adalimumab ~170-200 mg/L (100 ml culture vol. in 500 ml shake flask; unfed culture; repeated 3 times)
- Shows stable mAb production through 40 generations

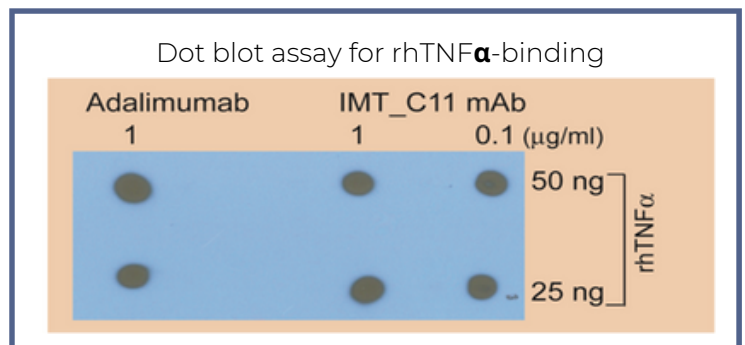


### Market Potential

Market size is estimated to reach \$4.3 Billion by 2025, growing at a CAGR of 4.98% during the forecast period 2020-2025. The biosimilar is also currently being tested for chronic skin diseases such as eczema, presenting new opportunities.

### Current Technology Status

- Development of Hypotheses and Experimental Designs Done
- Non-clinical *in-vitro* studies: Physicochemical characterization for Biosimilarity Done
- Non-clinical *in-vitro* studies: Functional characterization for Biosimilarity Done



For more info and biosimilarity data, please click:

[Tech Pitch PPT](#)

[Tech Pitch Video](#)