

Protein A ELISA kit

Most sensitive (9.01 pg/ml) colorimetric ELISA for monitoring residual contamination.

The Protein A EIA kit is a colorimetric immunometric enzyme immunoassay kit with results in < 3 hours. Absorbance is read at 450 nm. Ultra-sensitive quantification (< 1 ppm) of Protein A residuals in purified humanized monoclonal antibody preparations. This kit recognizes four different Protein A constructs.

Staphylococcus aureus Protein A is a 42 kDa cell wall constituent that is characterized by its binding affinity to the Fc portion of some immunoglobulins, especially the IgG class. The IgG binding domain (domain B) consists of three anti-parallel alpha-helices, the third of which is disrupted when the protein is complexed with Fc. Protein A is commonly used to purify antisera and in commonly used immunodetection and visualization techniques. Protein A participates in a number of protective biological functions including anti-tumor, toxic and carcinogenic activities, thus necessitating the removal of potential Protein A contaminants from antibody preparations for therapeutic use.

Citations: 4

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Ordering Information

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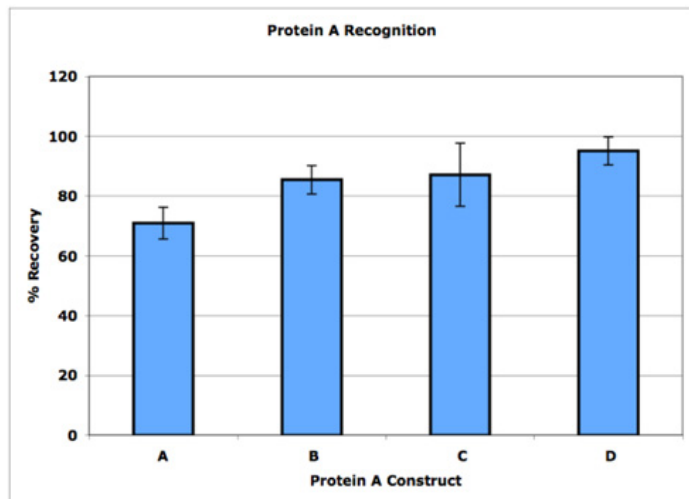
ADI-900-057

96 wells

Manuals, SDS & CofA

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- Highly sensitive measurement, detecting as little as 9.01 pg/ml (<1 ppm) of Protein A residuals in purified humanized mAb preparations
- Ensures accurate results as it recognizes several constructs of Protein A
- High throughput format with results in < 3 hours for up to 37 samples in duplicate
- Cost-effective solution compared to other technologies, providing a lowercost-per-test
- Useful for contamination analysis and measurement of Protein A variants in monoclonal antibody preparations



Assay recognition of different Protein A constructs, post boiling. Resulting concentrations were interpolated from kit standard curve. Percent recovery calculated by dividing observed concentration by expected concentration. A: Natural Protein A from *S. aureus* (Millipore), n=9; B: Recombinant Protein A from *E. coli* (Repligen), n=9; C: Recombinant Cys-Protein A from *E. coli* (GE), n=12; and D: Recombinant alkaline-resistant Protein A variant from *E. coli* (MabSelet SuRe from GE), n=12; graphical data represents statistical mean \pm 1 standard deviation.

Handling & Storage

Long Term Storage +4°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Application

Colorimetric detection, ELISA

Application Notes

For the quantitative determination of residual protein A contamination in protein A purified IgG preparations from any species.

Compatibility

This product is compatible with the [Absorbance 96 Plate Reader](#).

Contents

Microtiter plate, Conjugate, Antibody, Assay buffer 13, Wash buffer concentrate, Standard, TMB Substrate, Stop solution 2

Sensitivity

9.01 pg/ml (range 15.63 – 1,000 pg/ml)

Species Reactivity

Species independent

Technical Info / Product Notes

Assay recognition of different Protein A constructs from natural Protein A from *S. aureus* (M), recombinant Protein A from *E. coli* (R), recombinant Cys-Protein A from *E. coli* (G), and recombinant alkaline-resistant Protein A variant from *E. coli* (S) were tested and the resulting concentrations were interpolated from kit standard curve and displayed in the figure provided.

Application Notes:

[Comparison of Assay Methods for the Detection of Residual Protein A in Biological Therapeutics](#)

Wavelength

450 nm