

Human Anti-Histones ELISA (IgG)

(Catalogue number: 31A030)

◆ Histones are DNA-associated cationic proteins in the nucleus of eukaryotic cells to form nucleosomes. Anti-histone autoantibodies are present in a number of clinical conditions, primarily in systemic lupus erythematosus (SLE, ~80%) and drug-induced lupus (DIL, ~95%) by procainamide, hydralazine, chlorpromazine, and quinidine. Additionally, these autoantibodies are also detectable in other rheumatic diseases, including myositis and systemic sclerosis (SSc).

◆ ImmunoDiagnostics has developed an Elisa kit for quantitative measurement of anti-histone autoantibodies in human blood samples, with superior reproducibility, specificity and sensitivity, ready for clinical application:

Typical results

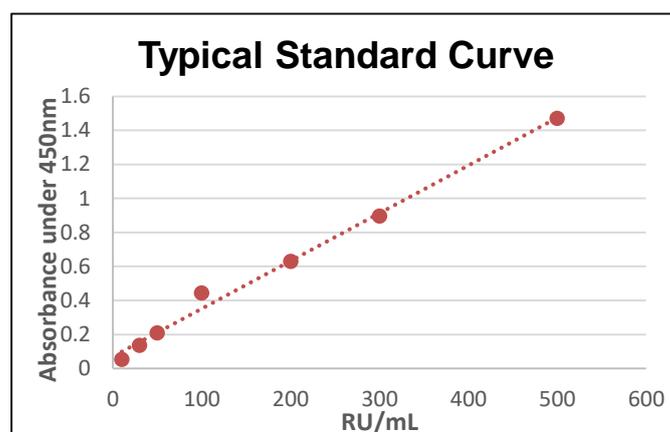
(Example only, not for calculation of actual results)

| Calibrator* | Concentration (RU/mL) | OD450 (Blanked) |
|------------------|-----------------------|-----------------|
| 1 | 500 | 1.469 |
| 2 | 300 | 0.895 |
| 3 | 200 | 0.629 |
| 4 | 100 | 0.444 |
| 5 | 50 | 0.209 |
| 6 | 30 | 0.136 |
| 7 | 10 | 0.053 |
| Negative Control | 0 | 0.054 |
| Positive Control | 147 | 0.480 |

* Calibrator standardised against NIBSC W1064. (RU=Relative Unit)

| Cut-off | RU/mL |
|----------|------------|
| Negative | < 42 RU/mL |
| Positive | ≥ 42 RU/mL |

*This cut off has been validated at ImmunoDiagnostics. However, we recommend each laboratory establish its own reference ranges of anti-histones levels to distinguish healthy and pathological subjects, as well as include its own internal control samples in the assay.



| Clinical Evaluation | | |
|-----------------------|----------------------|------|
| Sensitivity | 85.29% (n=34) | |
| Specificity | 100% (n=40) | |
| Inter Assay Precision | | |
| Sample | RU/mL (n=20) | CV |
| 1 | 64 | 9.0% |
| 2 | 173 | 8.1% |
| 3 | 363 | 7.5% |
| Intra Assay Precision | | |
| Sample | RU/mL (n=20) | CV |
| 1 | 83 | 4.0% |
| 2 | 222 | 4.6% |
| 3 | 419 | 3.1% |

References:

- Dumortier, H., & Muller, S. (2007). Histone Autoantibodies. In Autoantibodies (pp. 169-176). Elsevier.
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- Firestein, G. S., Budd, R., Gabriel, S. E., McInnes, I. B., & O'dell, J. R. (2016). Kelley And Firestein's Textbook Of Rheumatology E-book. Elsevier Health Sciences.
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